



UNIVERSITY OF
BIRMINGHAM

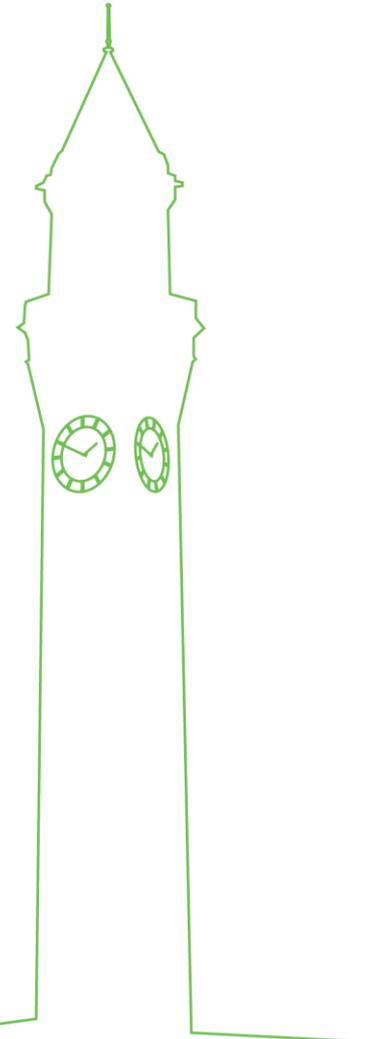
COLLEGE OF
ENGINEERING AND
PHYSICAL SCIENCES

Across Scales in Energy Decision-making (ASCEND)

Edinburgh workshop, 2nd November 2017

Dr Jonathan Radcliffe

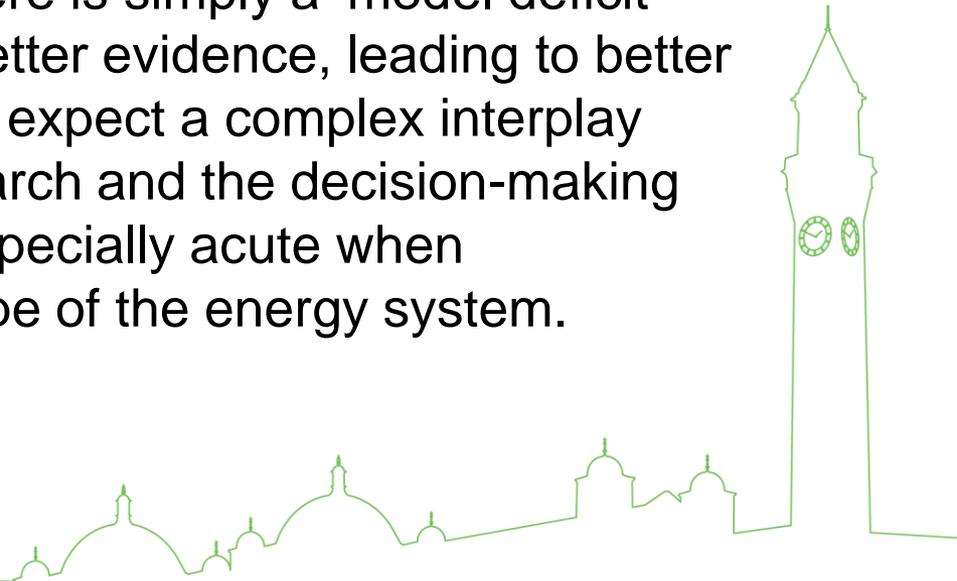
Senior Research Fellow, Birmingham Energy Institute



Aims

To analyse how whole energy system analysis and modelling is currently used in decision-making processes across scales, and identify ways in which the research – policy – decision-making relationship could be improved in the future.

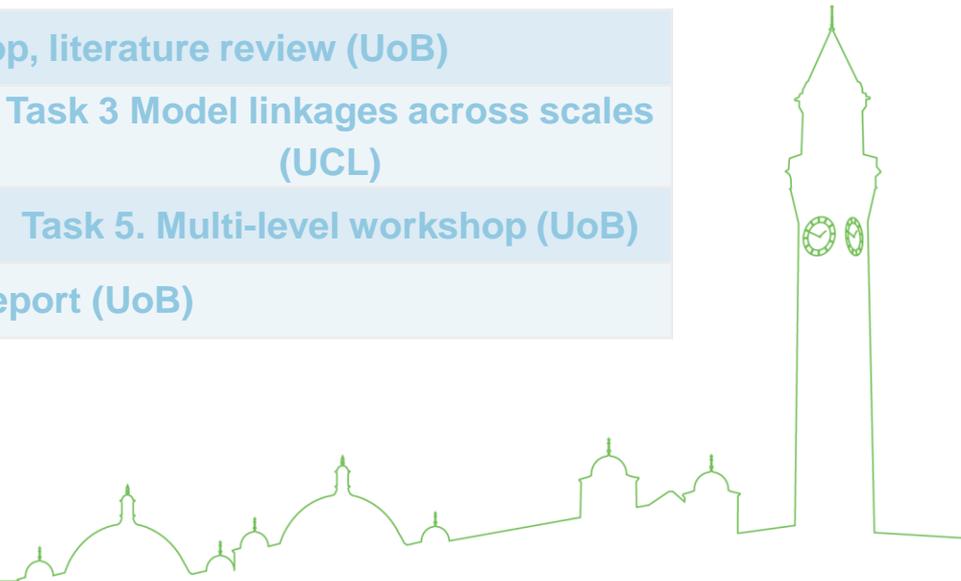
To challenge the assumption that there is simply a ‘model deficit’ – i.e. that ‘better’ models would give better evidence, leading to better decisions and outcomes. Rather, we expect a complex interplay between the modelling, related research and the decision-making processes - a complexity which is especially acute when considering the multi-scalar landscape of the energy system.



Research team

- University of Birmingham: Jonathan Radcliffe (PI), Timea Nochta (Researcher)
- University of Edinburgh: Mark Winskel (co-I)
- University of Leeds: Catherine (Frin) Bale (co-I), Peter Taylor (co-I)
- UCL: Will McDowall (co-I), Francis Li (Researcher)

Step 1	Task 1. Internal workshop, literature review (UoB)	
Step 2	Task 2. Organisational network mapping (UoB)	Task 3 Model linkages across scales (UCL)
Step 3	Task 4. Scotland workshop (UoE)	Task 5. Multi-level workshop (UoB)
Step 4	Task 6. Report (UoB)	



Evidence-informed policy making

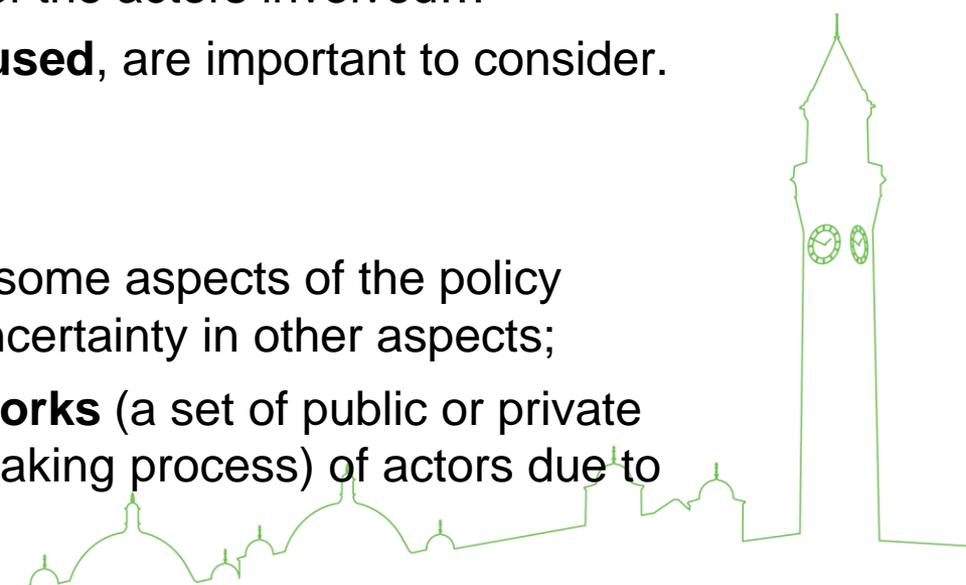
Using evidence to inform decisions is a central tenet of the policy making process in the UK. But, in practice, many other factors shape the outcomes, f.e.

- political expediency;
- restricted time frames and budgets;
- perceptions, ideas and competency of the actors involved...

Both **the evidence** itself, and **how it is used**, are important to consider.

Previous studies found that

- evidence can reduce **uncertainty** in some aspects of the policy problem, but also create space for uncertainty in other aspects;
- Decision-making takes place in **networks** (a set of public or private sector actors involved in the policy-making process) of actors due to fragmentation.



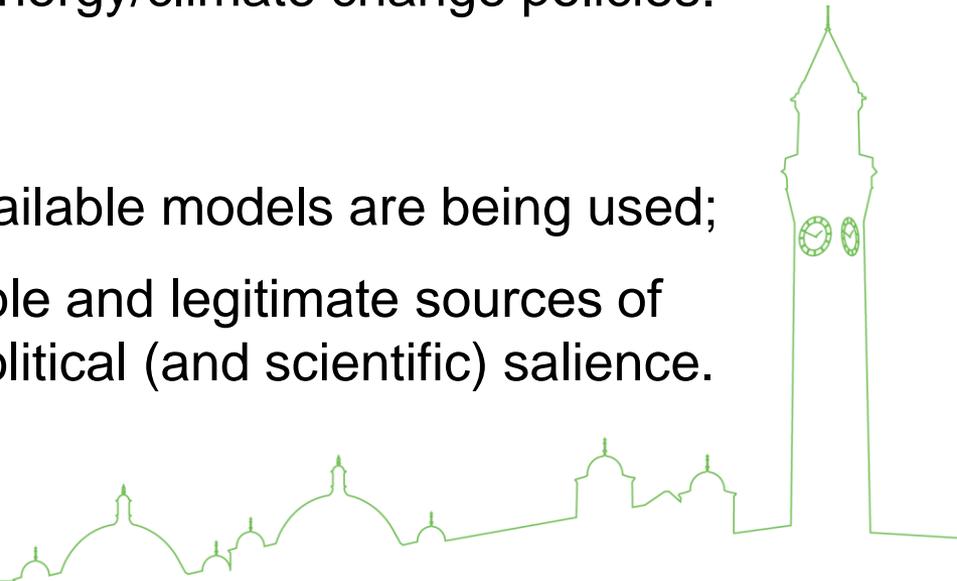
Evidence use in energy policy making

Research into the use of evidence in the **energy policy-making** process:

- The assessment of model use;
- How models act to allow different groups to work together;
- The governance processes and energy/climate change policies.

Main findings:

- A relatively small proportion of available models are being used;
- 'Usable' models need to be credible and legitimate sources of information and they must hold political (and scientific) salience.

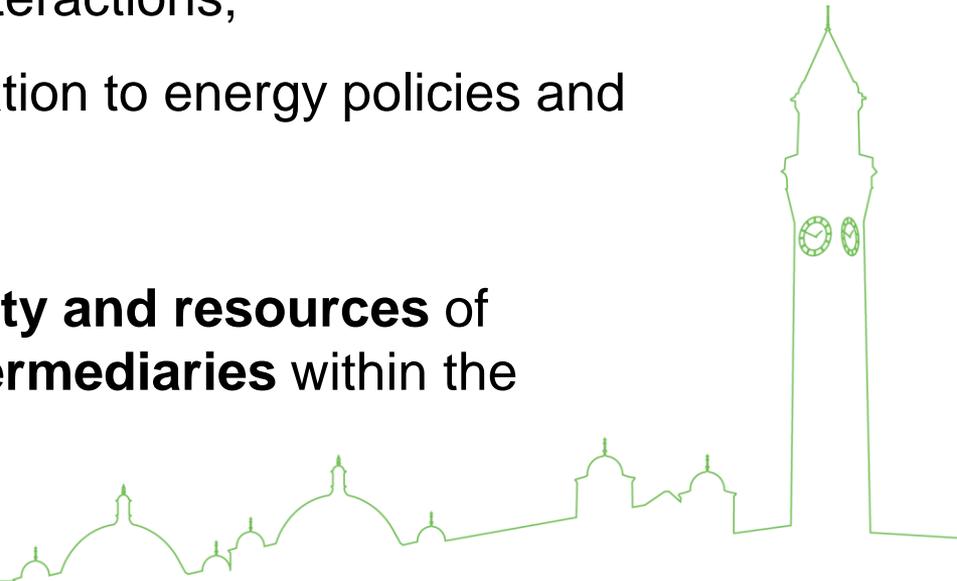


Evidence use in energy policy making

There are **gaps** in our understanding of

- the **actors** from different sectors (public, private, research) involved in energy policy making operating at each scale;
- the ways in which they **interact** with each other;
- the **nature** and **quality** of such interactions;
- their **impact on outcomes** in relation to energy policies and strategies.

Of particular interest: the **role, identity and resources** of organisations which (can) act as **intermediaries** within the networks of energy policy making.



Proposed directions for research

We can develop a better understanding of how energy policy-making could be supported through:

- identifying the relevant **actor networks** (structure, operation and impact) with the aim of exploring how models can best support energy policy-making across scales and sectors;

and

- improving the **quality of evidence** through models which have better representation of the energy system processes across scales in order to enhance their **salience, credibility** and **legitimacy**.

