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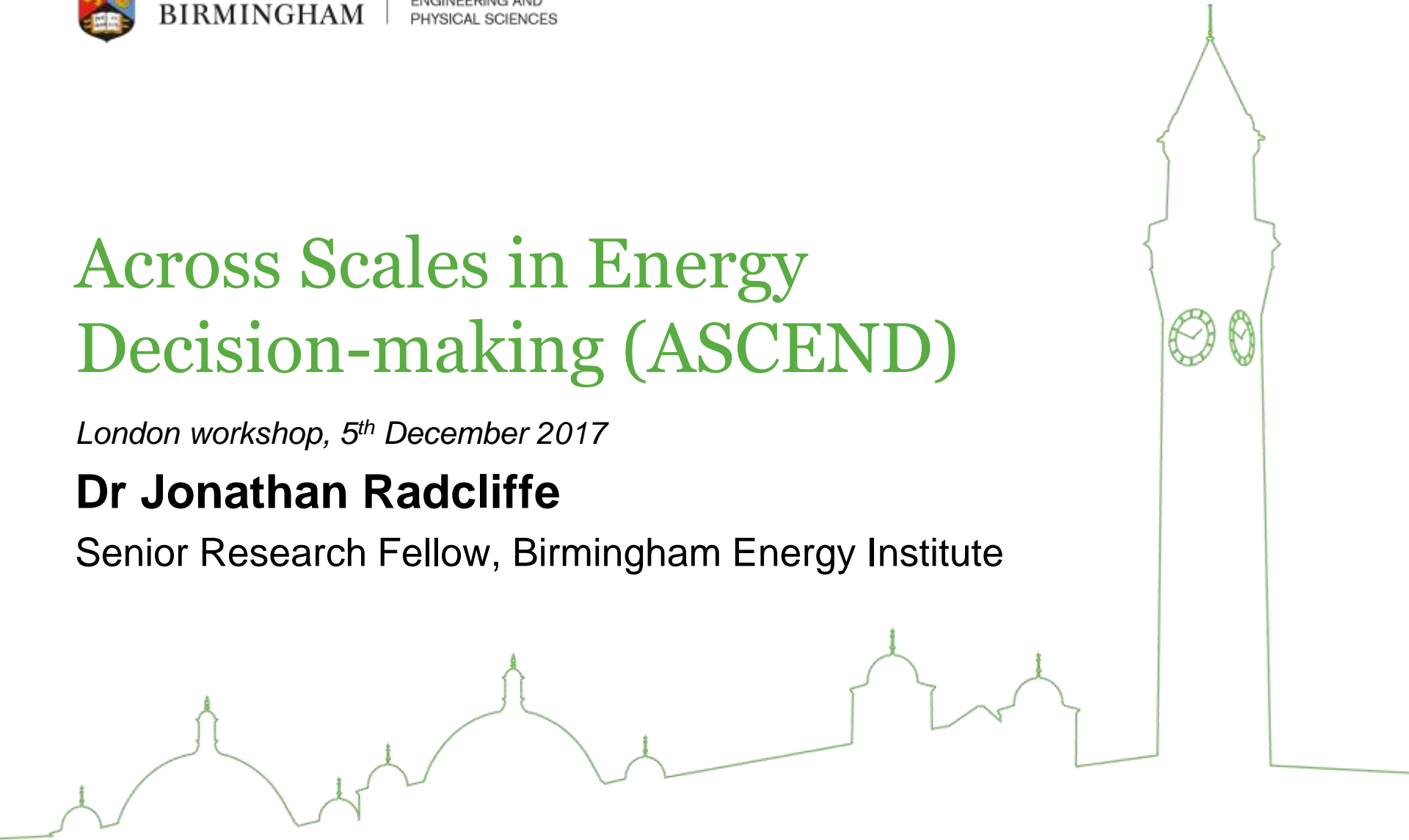
COLLEGE OF
ENGINEERING AND
PHYSICAL SCIENCES

Across Scales in Energy Decision-making (ASCEND)

London workshop, 5th December 2017

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Starting point

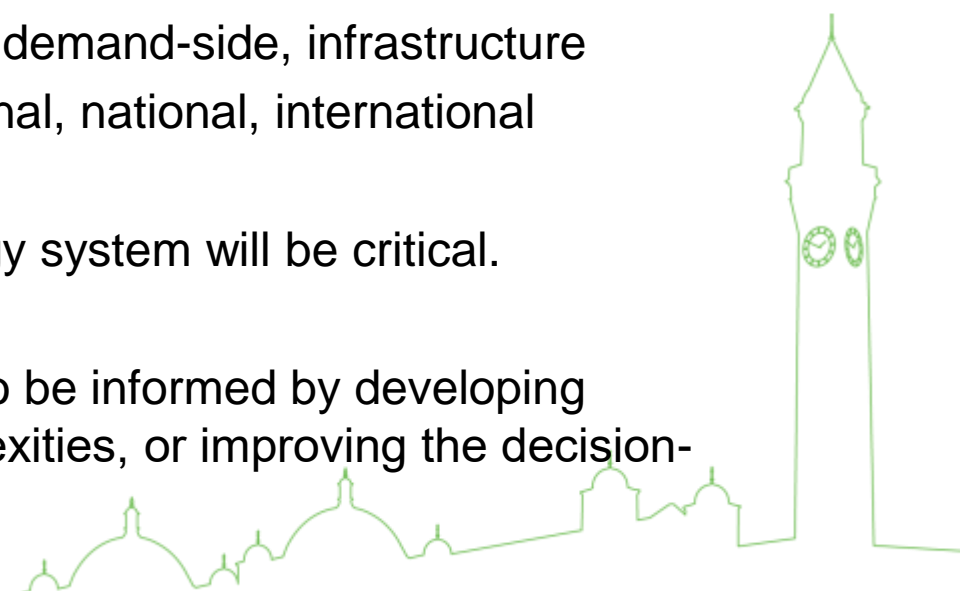
To meet the decarbonisation targets of 2030 and beyond will require a comprehensive suite of policies beyond what we have now, involving multiple actors and institutions.

Decision-making in the energy sector has competing interests across

- Policy priorities: environmental, societal, economic
- Technology choices: generation, demand-side, infrastructure
- Scales: local, regional, sub-national, national, international

Strategies that address the whole energy system will be critical.

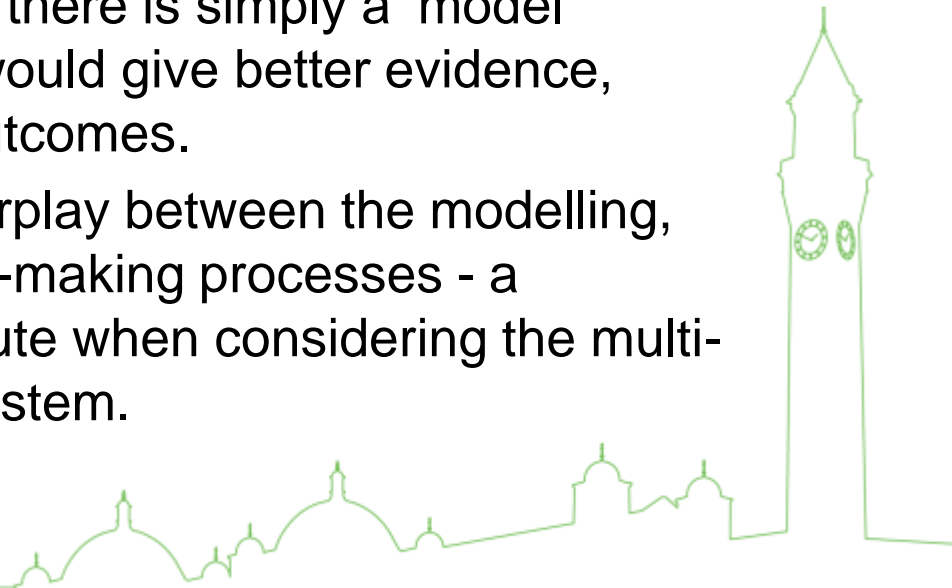
To what extent do the strategies need to be informed by developing 'better' models that integrate the complexities, or improving the decision-making processes?



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.

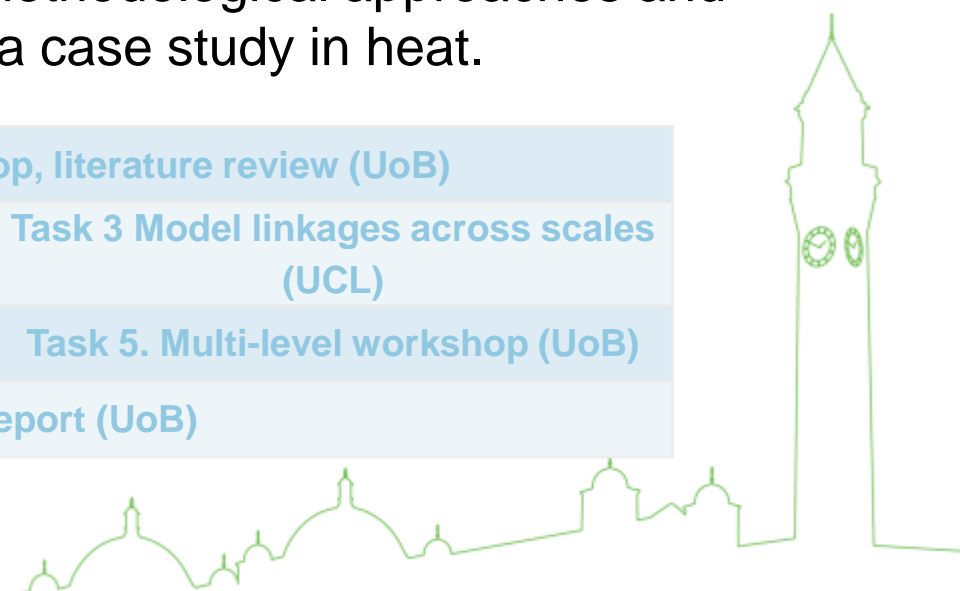


Research team

- 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)

9-month scoping study to consider methodological approaches and provide a high-level assessment for a case study in heat.

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)	

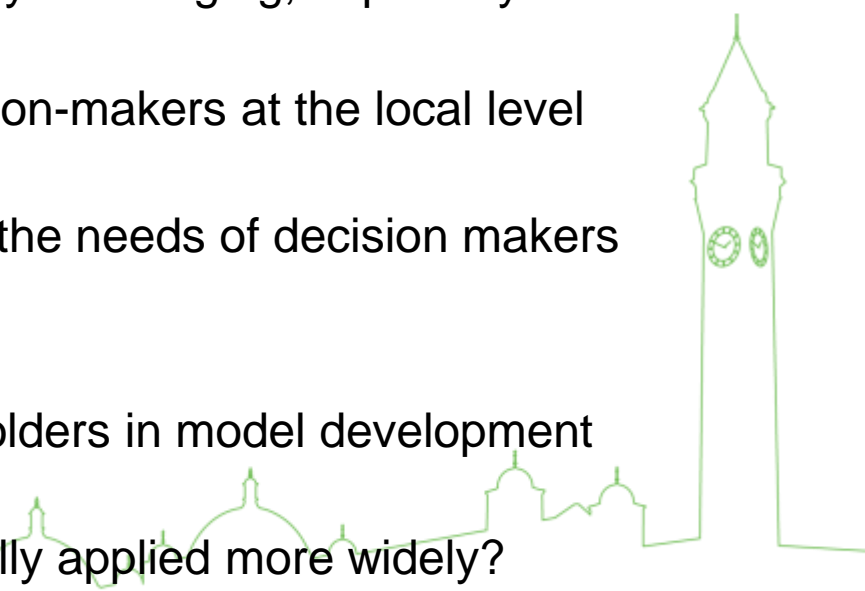


Issues to address today

- Decision-making, institutions and modelling tools are fragmented across scales
 - Does this represent reality, and is it a problem?
 - E.g. Could regions be optimising at a local level, which isn't in national or international interests?

- Linking models across scales is technically challenging, especially at the local level
 - What information/processes do decision-makers at the local level need?
 - How can multi-scale modelling serve the needs of decision makers at different scales?

- There is limited participation from stakeholders in model development or policy processes that use their output
 - Could participatory methods be usefully applied more widely?



Agenda

10:30	Introduction	Jonathan Radcliffe
10:40	Report back from Edinburgh workshop	Mark Winskel
10:50	Energy system modelling to inform policy-making	Ian Walker
11:10	A network approach	Timea Nochta
11:20	Table discussion 1: Mapping actors and models	
12:30	Lunch	
13:00	The use of whole systems analysis in local decision-making	Chris Grainger
13:20	Linking models across scales	Will McDowall & Francis Li
13:40	Table discussion 2: Local decision-making	
14:30	Break	
14:45	Participatory modelling	Catherine Bale
15:00	Table discussion 3: opportunities for incorporating participatory modelling in decision-making	
15:40	Plenary discussion: Extending the approach	

