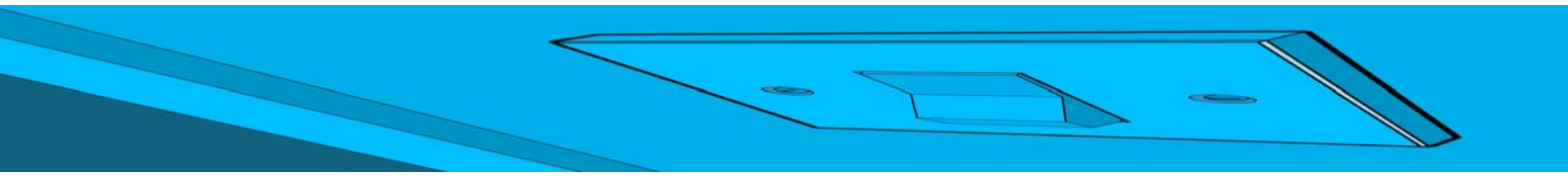

UKERC

PLACE AND ENERGY: DOES SCALE MATTER?

Meeting Report, 21 August 2006
London

Report by:
Simon Marvin, University of Salford
Jane Palmer, UKERC Meeting Place
David Plater, David Plater and Company

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The core objectives of the Meeting Place are to:

- bring together members of the UK energy community and overseas experts from different disciplines, to learn, identify problems, develop solutions and further the energy debate
- promote interdisciplinary working and engagement of stakeholders of various professions working in energy-related areas
- provide a forum for collaborative projects addressing key issues
- develop new synergies between different strands of energy research
- build up the strengths of the research community

CORE ORGANISING TEAM

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Contents

1. Introduction

This report presents the key outputs from the workshop on 'Place and Energy: Does scale matter?' which took place on 21st August 2006 at Imperial College, London and was hosted and sponsored by the UK Energy Research Centre Meeting Place.

The aim of the workshop was to identify the research and policy issues in developing a multi-level energy policy that takes 'place' and the relationships between 'scales' seriously, which would be of value to both policy and practice

The workshop brought together a diverse group of researchers, policy officials and practitioners to discuss the current state of understanding of the relationship between 'place' and energy, and the implications for future research agendas. All the participants were actively involved with energy issues across public, private and NGO sectors - and operated at national government, regional, city-regional and local scales (see Appendix A for a list of participants and their affiliations).

This report captures the key outputs from the workshop in five sections. Section 2 details the rationale for the workshop. Section 3 highlights the approach of the workshop and its outputs. Section 4 outlines the issues that emerged from the workshop. Section 5 responds to these key issues in detailing an innovative research agenda addressing energy and place, which encompasses six key themes. With these key themes in mind Section 6 poses the challenges for the next steps.

2. Rationale For The Workshop

Current energy policy and research tends to be characterised and driven by an over-emphasis on top-down and techno-economic approaches. There are a range of implications that flow from this, not least the scope and incentive for innovation itself to take place.

Conventionally, energy is seen to be a significant issue at three levels: 'global and local', 'national' and 'individual'.

Yet critically there are a range of other levels through which energy passes that present opportunities for either its **translation** or **transformation** - as it is shaped by regional, urban or other place-based priorities. Recent changes such as regional and city-regional energy strategies and innovative sustainable energy initiatives within pioneering local authorities all indicate that energy is a policy issue at new levels. More then ever, energy is becoming a multi-level policy issue but we currently have very little understanding of the issues involved in coordinating energy policy across these levels.

Greater understanding is likely to require a more precise articulation of the identity and nature of the various levels that are relevant and necessary to describe and deal with what is happening now - and how this could change. It is assumed that greater consistency / congruence would give rise to significant benefits – though achieving this could present significant challenges. Identifying the 'helps' and 'hinders' to greater consistency / congruence would provide important pointers.

Initially, there is a need to understand how the current situation is perceived and experienced by participants – and then to listen to their ideas for change.

- For example, what are the inter-connections between 'top-down' and 'bottom-up' approaches to energy policy? Is the 'top-down' approach very dominant? Would national strategy development be better-informed and better-served by a more iterative process that seeks 'bottom-up' input and, if so, how might this happen?

- For example, consider the treatment of regions in the UK Energy White Paper of 2003. Here, regional institutions – Government Offices in particular – were considered to be relevant and appropriate agencies for the **translation** of the White Paper objectives into sets of (regional) actions. This was because such institutions were closer to consumers and decentralised production technologies, such as micro-generation. In this model, the regional context is simply seen as a convenient space for the **translation** of national energy priorities into action at the local level.

- But we also need to consider the wider range of regional and urban energy initiatives - which seek to reframe energy in ways that are appropriate to their own contexts. Here, energy becomes linked to jobs, environment, fuel poverty, competitiveness and innovation. This provides us with examples of **transformational** work - where energy is activity reinterpreted in the context of specific locales and regions with their own distinct histories and cultures.

In summary, what do the workshop participants see as the current issues / problems? What are the likely benefits of resolving them and what therefore are the priorities for future research? What is the message we need to give to research funders and policy makers?

3. Workshop Approach And Outputs

Recognising the breadth of the topic and the variety of perspectives that were brought into the workshop discussion, participants were invited to complete a pre-event questionnaire. As well as including various questions that identified participants' main energy-related interests (as detailed in Appendix B), the questionnaire also asked for their perceptions as to the degree of co-ordination and integration of energy issues across the different partners involved. The responses to this question, and their views on the 'helps' and 'hinders' to greater co-ordination, are contained in Appendix C.

The workshop itself was structured around sub-group discussion and plenary feedback, focused on three key areas:

- Participants' main issues (or questions) concerning 'place' / level (Appendix D);

- The degree to which energy initiatives at local / city-regional / regional levels are aligned (or not) with national strategy (Appendix E);

- The implications of this alignment with national strategy (or lack of it) – and some key actions that need to be taken (Appendix F).

4. Key Issues Identified

Given the overall context and the diverse nature and multiplicity of issues involved, this event was seen as an exploratory and interactive step in the process of elucidating and articulating the issues. As such, it proved to be very successful.

Throughout all the discussions, the broad range of views and perspectives from the different contexts was apparent, highlighted by the difference in the words and definitions used amongst the participants, pointing to the need for greater clarity and a common language to allow more effective communication between scales.

The flip-chart outputs (Appendices D-F) reflect the multi-faceted nature of the 'place' debate, providing important and useful perspectives on the whole issue. The feedback from the sub-groups also provided some interesting models, which are included in the Appendices. These outputs speak largely for themselves.

That said, several points emerged that serve to underline the complexity of the issues and their inter-relationships – and the potential clarification and resolution to be gained by placing greater emphasis on a more 'place'-centric model:

- The diversity that exists between and within levels can be seen as a strength to be built on, but such complexity needs to be recognised and incorporated into any over-arching strategy, along with a better understanding of how energy is understood in different ways in different places;
- There is already substantial knowledge and experience demonstrating what needs to be done, but such examples may need more systematic scrutiny to identify patterns and transferable elements. Then the question is about how to put these into action and how to quantify and measure their effectiveness;
- Whilst a greater level of integration and co-ordination across levels (and, ultimately, between the 'top-down' and 'bottom-up' perspectives) was considered to be very important, it was also clear that attempts to 'over-coordinate' might also be unhelpful. There is a view from some that on-the-ground innovation may well happen currently – and be afforded space to grow – because of the very gaps in the system. Thus, a multiplicity of routes and options need to exist, with flexibility within them to enable adaptation to different contexts;
- Operators and innovators become adept at working within their 'micro-environment' to best effect - where possible, adapting and getting round the bureaucracy and frustrations that exist. The challenge is to extend and enlarge these 'micro-environments' until they coalesce to the point where the whole system can benefit from 'can-do' pragmatism and pathways;
- That raised another important issue: target-setting and accountability for delivery. In the first instance, there is the question as to where current targets are set – and by whom. A more collaborative and iterative approach would be highly desirable;
- Once jointly-agreed targets are set, there is then the issue of accountability and motivation for delivery – and the wherewithal to actually deliver against them. There was a feeling that, currently, those most responsible for delivery (particularly, Local Authorities) are probably the least well-equipped to do so. Given that a sense of achievement is probably the single most important motivator, this has the potential to drain energy, meaning and credibility out of the target-setting process.

Perhaps the most important aspect of the workshop was its ability to provide a signpost to five major research themes, which are detailed in Section 5.

5. Moving Forward: Translating Key Issues Into Research Themes

Overall, the outputs from the workshop provide pointers to six major – and inter-related - research themes:

i) Understanding place in transitions to sustainable energy systems

Understanding places in transition is crucial. Places are changing in many different ways: for example, housing growth areas are tackling totally different issues to housing market renewal areas. Sustainable energy systems need to respond to this variety and recognise that the process of change is dynamic. In addition, investigation of social aspects is not yet integrated to the same extent as technological aspects. The key issue for many participants was the role of cities and regions within a wider transition to sustainable energy systems. At national level the priority is to shift to a lower carbon energy system and place; cities and regions are seen as contexts for the implementation of these priorities. Yet we have relatively little understanding of what an accelerated transition to such a system would look like or what the role of place would be within this transition. Critically cities and regions are contexts where production and consumption interests could potentially be brought closer together to accelerate the transition.

Consequently the following questions where raised: How far do national energy priorities constitute a systemic transition in socio-technical organisational of the energy system? What are the roles of cities ands regions in systematic transitions to new energy systems? How can place shape and accelerate transitions and how does this need to be incorporated into national thinking?

ii) Understanding the adaptability of place and energy

A critical issue for many participants was the differences between different types of places – specifically cities and rural areas – in their differential adaptability to new energy systems. Adaptability needs to be seen as an asset of place in the same way that other physical assets are recognised to contribute to, for example, quality of life or economic viability of a city. A number of practitioners compared cities with a more open culture to innovation unfavourably to rural areas, which were often seen as more problematic in their approaches to new energy systems. Cities were even seen as a more amenable and attractive environment for the introduction of renewable energy systems.

Consequently, given the importance of energy transitions, there are critical questions about how we understand adaptability. How do places construct understanding of energy issues? What are the local cultural, historical and institutional contexts that shape the reception and production of energy technologies? How do developers of new energy systems understand place and context? Where is adaptability distributed and how can this be more effectively incorporated into policy and strategy?

iii) Understanding the affinities between national energy scenarios and local priorities

A key issue for many participants was the lack of in-depth understanding of the role of cities and regions in national energy scenarios and road maps. There was a concern that a target setting performance culture – e.g. for renewable production or CO2 reduction – was a blunt and ineffective way of translating national objectives into action locally and regionally. There was a requirement to more seriously explore the interrelationships between local and regional strategies and priorities and national energy scenarios and road maps.

Consequently, given the importance of futures there was a need to understand the following questions. How do national roadmaps and scenarios understand context and place in their visions of the futures? What are the resonances and dissonances between national futures and those produced in local and regional strategies and priorities where are the opportunities for more effectively aligning national and local priorities to generate more shared views of future energy systems that can build momentum to accelerate energy transitions?

iv) Understanding the role of intermediaries in shaping energy systems in local contexts

The fourth concern for participants was how are energy transitions shaped in a particular context. Centrally who are the intermediaries who are responsible for reshaping the production and consumption interests that can create the context for the development and implementation of energy savings technologies and small scale production systems? Clearly there are a range of intermediaries – public agencies, public-private partnership and NGOs developed to reshape energy systems at local and regional level but we know very little about their effectiveness and the extent to which different models are able to accelerate energy transitions.

Consequently the key questions are: What are the key intermediaries reshaping the socio-technical organisation of energy systems? How do they shape systemic changes in local energy systems and what can be done to improve their effectiveness?

v) Understanding consumption, communities and stakeholders in context

The fifth issue for participants concerned local variations in consumption patterns, differences in community perceptions of energy, and the construction of stakeholder interests in energy issues. Participants were particularly concerned to understand how consumption patterns vary at the micro-level – how and why these variations were produced and what implications this had for the reshaping of energy use. Commercial participants noted variations in the reception of decentralised energy technologies in different contexts arguing that when compared to rural areas there was now greater acceptance of renewables in cities. This linked to a wider concern to understand community and stakeholder interests varied in different contexts and how participation and engagement strategies might reduce social conflict and help accelerate take-up of new energy technologies.

Consequently the key questions are: Why are there differences in consumptions patterns and stake holder interests in different social contexts? How does local context shape understanding of energy issues? How are these variations understood and how can this then feed into the development of strategies to accelerate the implementation of energy transitions?

vi) Understanding the governance of energy across multiple-levels

Finally, all the above issues were linked to a wider concern about the governance of energy when responsibilities are distributed – unevenly across a range of different levels. Major concerns were raised about the effectiveness of top-down coordination which simply sees context as site for implementation of national priorities. This was widely seen as insensitive to problems and opportunities of local context and separating out the conception of policy from its delivery locally thereby limiting effectiveness. There was significant interest in developing more reciprocal models of governance that were oriented around shared objectives, developed contexts for systemic social learning and more relational styles of working. Consequently the key questions were:

How effective is the current system of energy governance over multiple levels of governance? What alternative models from other sectors, policy contexts or other international models could build more effective transition capacity?

6. Next Steps

1. Feedback from participants on this draft to revise this workshop report
2. Support a scoping study to investigate the issues around ‘place’ and energy with wider stakeholder consultation to achieve consensus on the key questions and areas where research is most urgent.
3. Develop a research and policy programme to address these issues.

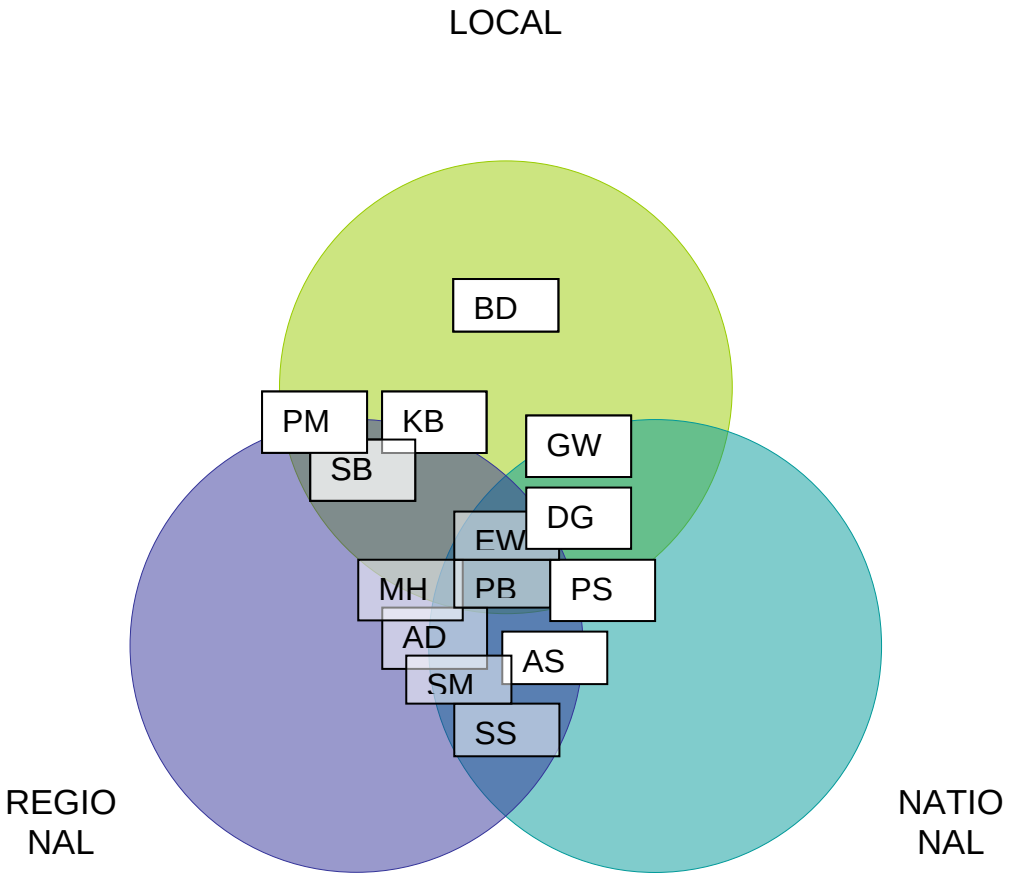
Appendix A

Attendees

- Keith Boxer, Manchester Is My Planet – Manchester Knowledge Capital
- Stephen Brown, RICS
- Peter Brunt, Energy Strategy Unit, DTI
- Andy Deacon, Greater London Authority
- Bill Dunster, BedZed
- Dan Grierson, The Northern Energy Initiative
- Mike Hodson, SURF University of Salford
- Patrick Mangan, Letterkenny Institute of Technology
- Simon Marvin, SURF University of Salford
- Phil Sinclair, CES, University of Surrey
- Adrian Smith, SPRU University of Sussex,
- Sigrid Stagl , SPRU, University of Sussex
- Gordon Walker, Lancaster University
- Elanor Warwick, CABE

Facilitators: David Plater and Jane Palmer

Diagram of participant's main area of work / interest in relation to scale



Appendix B

Pre-event material summary

Q1 What are the most important energy issues (e.g. production, consumption, economy, environment, energy technologies, renewables, Co2 emissions, fuel poverty, energy security etc) for you in your current role? For each one, please **also** state why.

- Territorial, Energy, Technology, Economic

- Infrastructure
- Institutional changes

- Energy governance
- Priorities (whose, when, where)
- How issues are negotiated in cities/regions
- Public engagement with renewables
- Failure of state/local agencies to join-up on macro issues e.g. CO2

- Production
- Renewables
- Wind energy
- Microgeneration
- Bioenergy

- CO_2 emissions
- Climate change
- Environment
- Inter-relationship between energy issues
- Energy security

- Consumption
- Energy efficiency
- Reducing energy demand through behaviour change

- Diffusion of existing energy-saving technologies
- Technologies (including hydrogen technologies)

- Community
- City…neighbourhood building scale
-
- Fuel poverty
- Enabling poor to uptake green technologies
- Well-being vs material wealth

- Economy
- Market
- Liberalisation
- Privatisation

- Harvesting of potential
- Relationships between issues (not on issues per se)
- Link: place and energy transitions

Q2 Are there particular levels (e.g. national, regional, city-regional and local) at which you normally work that are a priority for you in your current role? Please also state why each level is important.

- National: support/capital funding
- Regional: opportunities and support
- Local: community renewables
- European, national, regions, cities, city-regional, local
- Bottom-up and top-down
- Relationship between national frameworks and development of energy at urban and sub-regional levels
- What constitutes national policy when development and implementation are devolved to regions
- Regional level because difficult to be effective at national level
- Institutional relationships
- Public opinion represented by policy actors
- Technology development crosses all levels
- Some issues are more level-specific
- Important networks connecting horizontally within scales

Q3 Who are the three most important partners for your work on energy – and why? At what level/s (e.g. national, regional, city-regional, local) do these partners operate?

- EC
- Defra, DTI
- ONS
- National government departments (funding) and understanding
- National Government (established the market drivers through the renewables obligation)
- Policy officials
- SEEDA
- Environment Agency
- Local authority
- Local planning authorities
- London Energy Partnership
- London Climate Change Agency
- London Boroughs
- Delivery agents (EP, contractors, clients)
- Energy intermediaries
- Microgen supply chain
- Planners and clients
- Clients (for renewables)
- Carbon auditors
- Consultants and NGOs
- Higher education
- TSEC-Biosys
- Research councils
- Other universities & academics/researchers
- ‘Publics’
- Private individuals

Appendix C

Q4 Reflecting on your work, what are your experiences of the degree to which energy issues are coordinated and integrated across these different partners?

- National Government to Local Planning Authorities – good
- Wide range of issues – co-ordination difficult
- Community renewables – gone some way to connect national to local
- Different places/contexts (and degree of integration)
- Range = degree of integration (largely disconnected)
- Devolution but relatively little local (regional) power and resources
- Regions seen as sites for implementation of national priorities vs innovation and learning – need to reshape national priorities
- Goals, agency, structure…now more top-down than bottom-up
- Dialogue – yes, but deeper co-ordination?
- Little integration upstream and downstream
- Generally very poor integration
- Apathetic and ignorant to enthusiastic
- Varied drivers and motivations – poorly understood

Q4a Thinking about the future, how might greater coordination and integration between energy issues across different levels be achieved? What specifically do you feel would help or hinder this?

Helps

- Build change and relational framework
- More dialogue and greater understanding
- Need balance between co-ordinating and enabling
- Rewards for Local Authorities
- More standardised approaches to decision-makers
- Clearer, better lines of communication
- Enhance co-ordination between regions
- Greater understanding of need for multi-level governance
- Compulsory renewable energy targets
- Increase innovation, learning and diffusion of sustainable energy practices
- Financial penalties for poor planning
- Link different agendas together
- Pilot projects to agreed plan and then roll out

Hinders

- Nobody wants to lose the decision power they hold
- Allowing status quo to prevail
- A joined up DCLG?
- Stop trying to export the problem

Appendix D

Session 1
How would you articulate the main issue (or question even) concerning 'place' and 'level'?

Keywords

Scale: Scale has a degree of precision at which measurement is made (e.g. space, time, temperature, mass, groups of people). Measurement can be about policy, design, ambitions, good decisions etc. Appropriateness and specificity of measurement to place

Pathways: Allowing a multiplicity of routes/options to exist; multiplicity of actors and therefore decision-making processes

Responsibility: How you get those who should be to actually be responsible in the chain

Significance: What is the significance of differences – interplay of scale in different contexts: national – locality links/autonomy? Development of national policy vs delivery agent model

Agency: Ability of people in a place to shape the energy systems on which they reply – links to **identity**

Adaptability: Transition to an over-arching low-carbon system; meaning in difference contexts (historical, social, economic). Do they respond to national targets or so they shape their won? Different capacities to act

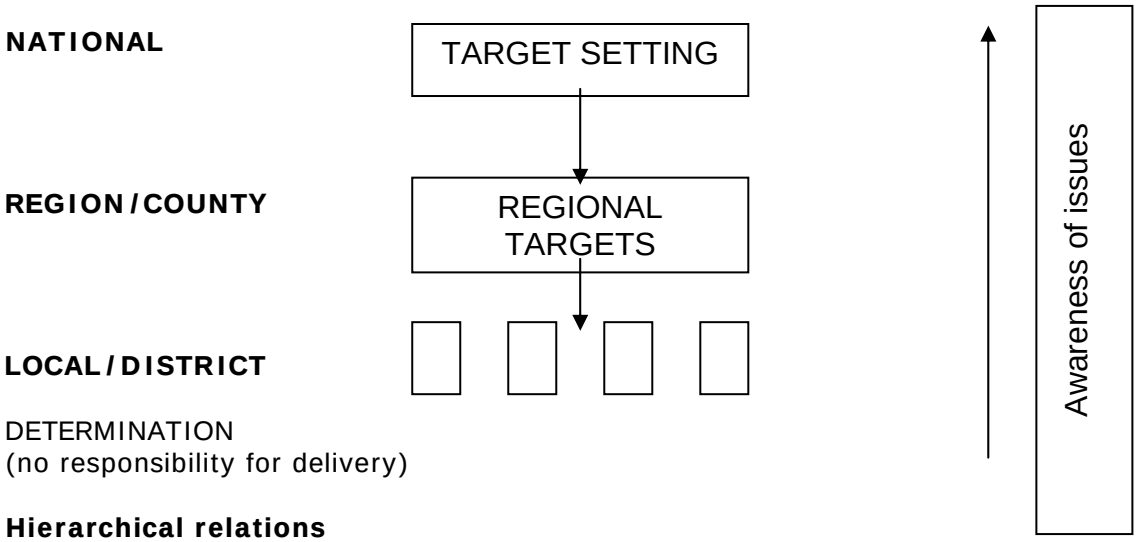
Ownership / Motivation: e.g. of local people: is it easier to deliver projects people have seen/want (have had experience of)? Something relevant at all levels (as appropriate). Not always 'exporting' problem to next scale (British national tendency!). Each claims answer at expense of the other – need holistic awareness. Everything needs to be done – not just one thing or at one level.

Appendix E

Session 2
In your experience (and bearing in mind the key partners you work with), are energy initiatives at local/city-regional/regional levels aligned with national strategy? What are the implications?

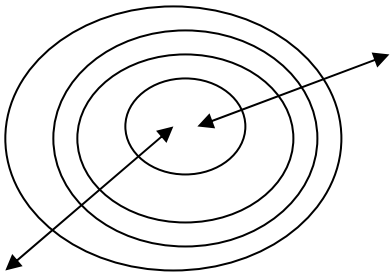
Group 1
Simon Marvin, Sigrid Stagl, Dan Grierson

Feedback flipchart
Current picture



DETERMINATION
(no responsibility for delivery)

Hierarchical relations
- Top-down imposition
- Separation/disconnection
- Slow and random transition



Interpenetration
- Co-production of strategy and implementation
- Negotiated 'transition'
- Bypass awkward scales

Transitions to sustainable energy systems
- Which energy system?
- Shared vision on different scales?
- How to co-produce shared visions?
- How to create momentum and critical mass for cultural change?

Notes on feedback
- Present system of delivery is very hierarchical with hierarchical imposition of targets but lower-level responsibility for delivery. National targets aggregated regionally
- Local authorities least equipped to implement strategy and no responsibility for delivery – schemes often separate from targets
- Different areas within the UK are better than others with more shared responsibility and inter-relationship between levels e.g. GLA
- Unless there's a shared understanding of what is required and what could be achieved, all implementation will be slower
- There's a separation between the formulation of strategy and those responsible for making it happen

- Need to find a way of feeding in local experience and knowledge: move to co-production of strategy – involve those who implement
- Shared vision and collective momentum at lower levels is not happening to the extent it could – needs a better process
- Not necessarily suggesting that need to bypass awkward scales, but acknowledging that this sometimes happens

Group 2
Peter Brunt, Adrian Smith, Andy Deacon, Phil Sinclair

Individual post-its:
- Private sector/supply industry
- Technology choices: nuclear/CCS
- Homogeneity vs diversity of national strategy target (e.g. local contexts, one size fits all)
- Less effective 'co-ordination of effort'? But who co-ordinates and how?
- Designate detailed roles or autonomy?
- Selective re-interpretation of national strategy at lower level tiers – to fit priorities at that level
- Duplication of effort – waste
- Costs of government at different levels
- Spatial differences/strategies: place/identity, specificity – constraints of what's already there
- Delivery of strategy – big issue locally/regionally
- Compliance with policy/targets: mixed – over-comply/comply/laggards
- Communication between levels
- Measurement – evaluation of compliance
- Long-term goals/objectives, CO2 targets
- Objectives broadly aligned with some difference of emphasis (e.g. nuclear)

Feedback flipchart
- National strategy is evolving and broad policy objectives at different levels are generally aligned
- Implementation carried out by three broad groups of people: Innovators, Compliers, Laggards
- Depending on which of these are involved, there are a number of issues and implications:
  1. homogeneity and diversity
  2. Duplication of effort (waste of money/resources?)
  3. Measuring performance/communicating (to identify if in line with national strategy)
  4. Discretion (policy-makers will choose to promote issues in line with their interests leading to a gap between policy formulation and implementation)
  5. Multi-level government vs governance (i.e. private sector, partnerships, technology holders)
  6. Starting with a blank sheet (i.e. how would we then choose to design structures) vs inherited structures (i.e. the status quo)

Notes on feedback
- Questioning what a 'national energy strategy' is – there is a lack of common definitions / shared language
- Broadly there is an agreed national strategy, but differences at level of implementation
- If your target groups are diverse, then it's more complex
- Duplication may be a positive thing – may be necessary for people/organisations to have to go through the process themselves
- Performance can be difficult to measure e.g. communication between levels
- Sub-national activity – local implementation effectively reforms the national strategy

- Multi-level government versus governance – it's not just about levels of government
- How do you design the delivery of energy policy into National / Regional / Local levels? Would you choose the current structure? Or design policy differently?

Group 3
Patrick Mangan, Gordon Walker, Mike Hodson, Keith Boxer

Individual post-its:
- Are issues that may primarily be seen as energy issues nationally always/often seen so regionally/locally?
- Disconnections between regional/local agency and national "strategy"
- National strategy? Do we sometimes ascribe too much coherence to the Centre?
- Broad strategy (came from local - multi-actor/multi-demand) to expand and develop community renewables (no explicit targets, funding opportunities, support networks). Has been lots of activity – over-subscribed – pushing ahead of national strategy character and what has gone – has only partially matched aspirations?
- Who controls and who should control resources?
- How has national policy aligned with local community initiatives?
- How do energy issues impact on other aspects of society? How should this be addressed?
- Who can/should manage power relations and how?
- Who should and does define a strategy?
- How can people be educated/energised about the issues of relevance to them?
- How do we reconcile such differences?
- What is a strategy aiming for/ How is this determined?
- By what mechanism should stakeholders interact?
- Who should participate in strategy development and how?
- What are the roles of agencies?
- 1. Manchester is a nuclear free city that does not support the solving of the energy problem by building more nuclear power stations
- 2. NWDA sees economic opportunity in the nuclear sector (primarily in Cumbria) therefore is likely to be pro-nuclear new build
- Energy efficiency ambitions are generally agreed at local/sub-regional levels
- Development of renewable energy power generally agreed at 3 levels

Feedback flipchart
National strategy (e.g. nuclear)
- Debatable coherence/existence
- Dynamic (and geo-political)

Competing accountabilities/autonomies (regional/local)
- Who defines what elements of strategy??
- Different opportunities and interests
- Different dynamics/timescales

National aligning with or enabling the local??

Participation/Engagement/Education
- When?
- By whose agenda?
- Scale??
- How?

Notes on feedback
- Used nuclear as an example to frame response – potential for dis-alignment
- National strategy not always coherent with local requirements/aims e.g. Manchester is a nuclear free city so would challenge a pro-nuclear national strategy

- National policy is very dynamic and shifting in a geopolitical sense
- Geo-politics are also very dynamic and differ to local issues – results in a disconnect – just because the geopolitical changes, doesn't mean that the local changes
- May be very difficult to link to local thinking and why there are dis-connects - national policy needs to be responsive to what's happening locally
- Local and regional levels also dynamic but on varying timescales
- Who is making policy and where [when, who etc]?
- You can have a national strategy that may not have a lot of legitimacy without participation/involvement – therefore expect conflict rather than consistency e.g. nuclear waste management

Group 4
Elanor Warwick, Stephen Brown, Bill Dunster

Feedback flipchart
Good news
- We know what needs to be done…e.g. land values vs environmental investment, future-proofing, both new build and refurbishment
- Some organisations are going that bit further – genuine commitment
- Taking on board the whole message: carbon = body bags, consumer awareness does have punch
- Guerrilla solar/wind vs gorilla nuclear

Bad news
- Progress despite government:
  - frameworks
  - targets
  - initiatives
  - market-led energy targets
- So who are really thinking and innovating?
  - Greenpeace/FoE
  - Putin
  - Al Qaeda
  - Sunday Magazines
  - David Attenborough
  - Ken Livingstone
- Governments love Big Players who love simple centralised solutions
- All progress is a myriad of distinct level, individual interaction

Notes on feedback
- Very broad discussion – coalescing it down was the hardest bit
- Focused discussion on where change is actually coming from and who is changing/why change is happening despite the Government
- Myriad processes get simplified at the top level
- Economic and political issues at play
- Easy to identify examples of good practice but difficult to show how good experiences are translated back into policy/strategy
- What is the motivation for organisations to 'go further'?
- Revise top-down approach
- Carbon allowances would force all levels to take responsibility – everything needs to be done at all levels
- Guerrilla solar where individuals just get on with it e.g. installing solar even if it's against national strategy – giving up on the state because it's not responding fast enough (e.g. how Danish wind industry began) – exact opposite of centralized Government policy top-down imposition of nuclear power

Appendix F

Session 3
So what? Why are these issues important? What are some key actions?
(Motivation? Audience for research? Actors? Too broad? Avoidance? Sense of urgency? Status quo?)

Group 1

Simon Marvin, Sigrid Stagl, Dan Grierson

Feedback flipchart

Question: What is the role of 'places' in energy transitions?

1. Problem: Understanding how 'place' and energy are configured in existing governance framework
2. Why: Developing more sustainable energy systems (and more effective ways of managing transitions to them?)
3. How: Understanding differential adaptability of places to shape, accelerate, or 'slow' transitions in energy systems?
4. Polycentric governance and learning? Institutional change

Notes on feedback

- Much of debate on energy is political and doesn't take 'place' as its key focus. Need to put context back in
- Requires more systematic scrutiny – look at how place and energy are treated in other regions and countries
- Critical question is about understanding differential adaptability
- How is energy seen in different ways – if we understand that, we could do more to define / alter how transitions take place
- Responsibilities need to be highly distributed throughout the system
- Better to think about having different coalitions of interest
- Why scale matters at local level – more sustainable, more diversity, more responsive. Therefore scale matters

Group 2

Peter Brunt, Adrian Smith, Andy Deacon, Phil Sinclair

Feedback flipchart

- Question: what needs to happen at difference 'scales' to meet key energy challenges?
- Question: does scale matter?
- Why is scale important?
  - lots happening (e.g. every region seems to have 10 or more initiatives)
  - lots of people think it is important
  - nothing solid/quantified to show why
  - lots of people think other scales are important barriers (needs to be investigated)
  - policies look different at different scales (central simplicity)
- What needs to be studied?
  1. case studies (liberal markets) to identify key energy problems/challenges and comparisons with a similar area
  2. 'mental maps' – what different stakeholders have at different scales of energy policy
  3. 'grid' of what does and what needs to happen at different scales to achieve goals (demand and supply) and background
  4. test 'ideal types' – bottom up and top down
  5. cost and carbon saved from existing initiatives
  6. business perspectives of scale

Notes on feedback

- Considered how significant scale was in terms of energy
- Little research has been done on quantifying why it is important therefore little evidence as to why central government should focus on these issues
- A bottom-up study across several different case studies would help unravel patterns and compare across similar areas and different scales – identify similarities and differences and new ways of looking at things
- Need quantification of what is already happening (item 5)
- Social learning and dialogue between initiatives is important
- Two contrasting perspectives of multi-level governance: - delivery at lower levels – has to be an agreed strategy across them and a strong regionally-managed perspective - other view – to let it all go and encourage diversity
- Co-ordination and integration needed to promote learning and dialogue
- Does scale matter to businesses? What do they think about scale and does that matter in their energy business?
- Might be possible to compare systemic approaches to decision-making (businesses and others) to see differences

Group 3

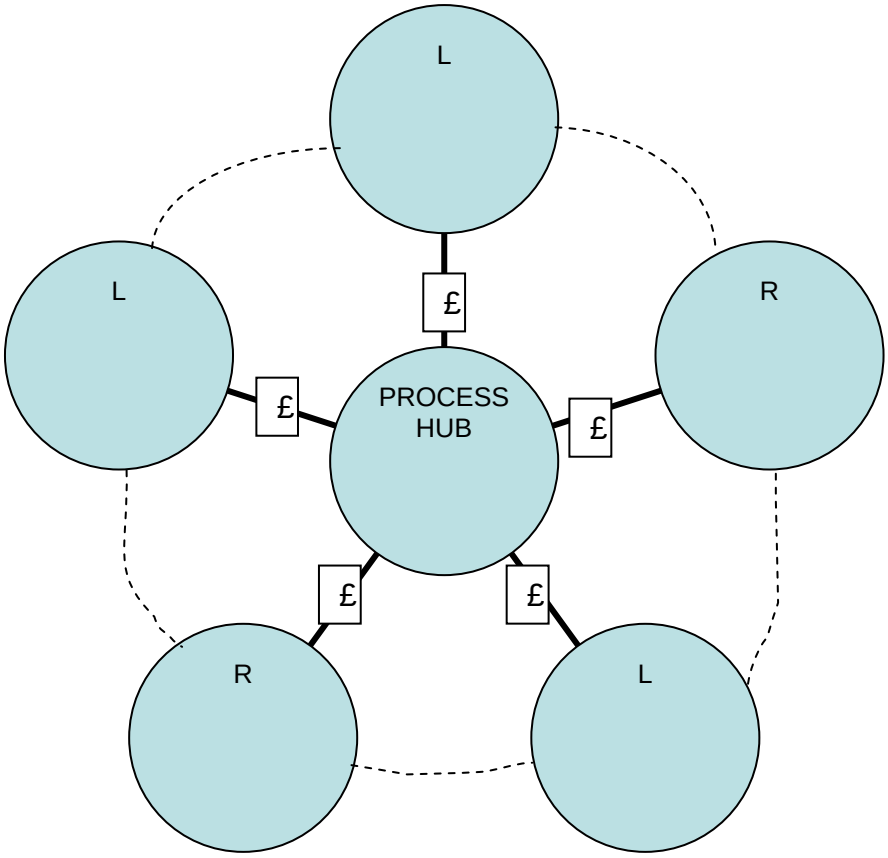
Patrick Mangan, Gordon Walker, Mike Hodson, Keith Boxer

Feedback flipchart

- National strategy critical
- Island autonomy
- Hybrid/iterative process
- Incentives to innovators

Notes on feedback

- Critical of national strategy – looked at scenarios to consider different ways of working e.g. as an island with complete energy autonomy – this helped think through the tensions that exist between autonomy vs system – links in with greater responsibility with islands being responsible for their grids (although a bit pie-in-the-sky)
- Without a national strategy, regions would then have to produce plan – iterative process between national and regional
- Hybrid/iterative process orientated more at the local/regional level
- At a national level, strategy is very empty – international commitments etc
- Regions or localities have the task of making their plan fit into the national plan – lots of flexibility/tension between regional and central government (funding etc)
- Diagram shows lots of separate semi-autonomous plans with strong interactions through the hub and all sitting within a national strategy
- Focuses on accountabilities/autonomies and how things would play out
- Linking between regions to give national strategy – a much more enabling one and what is wanted locally, plus lots of innovation + ownership of targets
- How radical is this? There are probably some examples of this type of process within Government
- Overall – it's a view of how things might pan out; less focus on national in favour of regional and incentives to innovators



Group 3 diagram to illustrate interactions between different scales
L=local, R=regional

Group 4

Elanor Warwick, Stephen Brown, Bill Dunster

Feedback flipchart

Note: the table illustrates two alternative (not mutually exclusive) approaches

Top down	Links	Bottom up
• Sustainable communities plan • 4 million new homes by 2016 • One size fits all 60k house • House builder led • 5% max hike to purchase cost • Lobby to maintain value of existing land-bank • Reluctance to increase construction cost • Reluctance to micro-generation • Large multi-nationals rule agenda • Renewable generation marginalised • All responsibility designated to central government for CO_2 reduction • Local planning scope stays same • Need for stronger centralised government security and control • Escalation of fear of conflict • Increased cost of securing supply of fossil fuel and uranium supplies • Economies of scale for nuclear • Research budget for top down 'hard science' fission • Distrust of democratic process HARD (scary) SCIENCE	Holistic communication to general public relative merits linked Nuclear welcomed>centralised energy supply> linked Local development control (planning dept) turbo charged	• Opportunistic urban infill • Loads of conversions • Ad hoc / bespoke / modification • House purchaser led • 10 yr payback on microgen OK? • Consumer power • B&Q: PV/solar thermal/micro-wind • Personal ownership leads to demand reduction • Plurality of generation • Awareness of links between personal CO_2 footprint and number of deaths in climate hot spots • Fuel poverty means testing: the only way to receive government microgen grant • All new build must be zero carbon – legislative enforcement • Regional energy planning • Local microgen targets • Personal carbon credit card • Local authority planners – responsibility and scope increased • Local democracy enhanced • Economies of scale for renewables • Research budgets for behavioural science SOCIAL SCIENCE

Notes on feedback

- 'Top-down' illustrates the current situation and tendency to look for magic bullets in the hard science – the resource agenda and business as usual
- Table demonstrates polarity and how important the process is
- Then wider – how energy is delivered centrally in the distribution system
- Producer situation – production for a passive consumer base who take what is given
- Planning also has passive recipients who are told what to do
- Renewables are marginalized; CO_2 is pushed to Government
- Global/geopolitical element introduces concerns e.g. security of supply, limited sources of uranium
- Magic bullet solution seen as desirable – nuclear fission versus marginalized funding for other options
- 'Bottom-up' is much more opportunistic – land use, house purchaser-led, consumer power, urban infill
- Possibilities of generation – bring together sense of personal responsibility link to personal credit ratings etc
- 10-year payback would give sense of personal ownership
- Local micro-generation targets would require greater involvement from LA
- Need to understand behaviours / social sciences
- Both scenarios in table are possible if they were ever offered, but point is that they never have been
- Shows polarity – and how important the process is – otherwise, get the wrong answer
- With the right emphasis on public consultation, giving the right to public to allocate budgets, then both side might be equally plausible
- Cost of the Gulf war £35 – 60 bn – could have kick-started the renewables strategy
- Need to re-empower politics