



# Participation, power and sustainable energy futures

A report of the ESRC Critical Public Engagement seminar,  
26 October 2010, SPRU, University of Sussex

Edited by Jason Chilvers, University of East Anglia

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## Introduction

The energy system and the need to build more sustainable energy futures has risen high up science and policy agendas in the context of proliferating discourses on climate change, sustainability and security. Whilst public participation has long been a feature of energy debates, this complex interrelation of framings and imperatives has brought about an increasing diversity of democratic experiments across the energy domain. Institutionalised policy-oriented spaces of invited public deliberation and engagement have grown considerably (such as recent UK consultations on nuclear power and radioactive waste) which often claim to uphold normative principles of democratic empowerment but also attract popular criticism as being exercises in gaining decision justification and public acceptance. The need to reduce energy demand and transform the consumption practices of citizens and consumers has led to a wide range of pro-environmental behaviour change initiatives in the workplace, home and wider society, often driven by instrumental imperatives, which are increasingly incorporating group-based and deliberative processes. More organic, spontaneous, and uninvited forms of public engagement, organised by citizens and groups in civil society by themselves, continue to grow, ranging from various forms of activism and protest (such as Climate Camp) to alternative models of distributed or grassroots innovation (as exemplified by the Transitions movement) which offer up substantively different pathways of sustainable energy transition.

These alternative forms of public engagement with energy-related issues raise a number of questions important to the wider seminar series. What meanings and forms of participation are embedded in these often disparate spaces of public engagement with energy? How do they differentially construct and produce visions the public, science, innovation and democracy? How are these different spaces of public engagement framed, governed and controlled, and with what exclusions and effects? What is the relationship between these different forms of democratic engagement in energy-related issues and the trajectories of energy innovation pathways? How does the materiality of sustainable energy infrastructures shape the forms of public engagement that get enacted? What do we mean by critical public engagement with energy, in terms of the ways in which we critically study and practice participatory governance?

The fourth workshop in the ESRC seminar series *Critical Perspectives on Public Engagement in Science and Environmental Risk* explored these and other questions in the context of energy systems and transitions to sustainability. The workshop was structured around exploring the different spaces of engagement in energy outlined above through presentations followed by critical responses in small group and plenary discussions.

## Workshop presentations

The workshop was opened by Professor Andy Stirling (Director of Research, SPRU, University of Sussex) who welcomed participants and emphasised the critical and timely importance of considering public engagement in relation to increasingly urgent debates around energy transitions. Dr Jason Chilvers (School of Environmental Sciences, UEA) then went on to introduce the seminar in the wider context of the seminar series as a whole and set the scene for the day in terms of the overall framing and questions of outlined above. He highlighted the diverse meanings and spaces of public engagement that coexist in the energy domain, which set the scene for the opening presentation by Professor Gordon Walker (Lancaster University).

Gordon embraced and encompassed this diversity of public engagements with energy in his paper 'Public engagement in the low(er) carbon energy system: diversity, materiality, agency'. Drawing on a range of ESRC and other UK Research Council funded projects that he has been involved in, Gordon explained how most of the multiple meanings of engagement, and constructions of the public, are at play in the context of energy including: invited/institutional through to organic/citizen-led engagement; local/proximate through to global/systemic; real/material publics as well as imagined/anticipated ones; and engagement through practices/doing or policies/deciding. A key question that emerged from this perspective is how do these different forms of engagement, that often occur simultaneously, interact and connect with each other? In making sense of these multiple publics Gordon invoked the notion of the 'phantom public' through drawing on earlier work of Walter Lippman and John Dewey, to explain that 'the public' does not exist in a stable and constant form and that it materialises around issues and objects of attention. Publics are 'called into being' in context, continually forming and reforming. Gordon ended by raising the following critical questions on how these roles, visions of the public, and engagement processes interrelate or combine. How does the trajectory of low carbon system transition 'bring some publics and engagements into being' and not others? How does public engagement 'bring into being' some forms of 'low carbon system development, rather than others? Which roles are being imagined and anticipated by institutional actors; and with what consequences? Which forms of engagement are being promoted and enabled; which resisted or downplayed? Who is missed, which voices are excluded?

The seminar then moved on to consider more detailed presentations in each of the three areas of public engagement with energy outlined in the introduction: i.e. policy decision-making, behaviour change, and uninvited spaces of engagement. The two papers exploring critical engagement and energy policy were both situated in the context of nuclear power. Professor Gordon McKerron (SPRU, University of Sussex), the ex-Chair of the UK Committee on Radioactive Waste Management (CoRWM), gave some very personal reflections in his presentation on 'Lessons from CoRWM'. He explained that CoRWM is an independent advisory body set up in 2004 to advise the UK Government on strategies for managing the UK's radioactive waste in the long term. CoRWM were tasked with undertaking a policy options appraisal process between 2004-2006 based on good science and involving widespread public and stakeholder engagement. Gordon noted how the relative extent and roles of science and public participation in the process was a source of fierce debate within the committee. The power and politics of participation was further exposed as the UK Government clearly stated that CoRWM's proposed solution should focus on legacy (or past) radioactive wastes but by the time CoRWM gave its final recommendations the Government saw the proposed solution as a way of managing new waste arisings as part of its argument

for a programme of new build nuclear power stations. Overall the public and stakeholder engagement process was considered a success, although Gordon noted that it could have used the internet in much more effective ways.

Similar perspectives on how power and politics control the forms of participation that get enacted were offered by Dr Paul Dorfman (Warwick Business School, University of Warwick). In his paper 'Nuclear Consultation: rhetoric and practice' Paul traced more recent consultation processes on UK nuclear policy over the last half decade and developed some strong criticisms. He noted how the 2006 New Labour Energy Review consultation had been challenged through a Judicial Review brought by Greenpeace and how the consultation process was ruled to be 'misleading', 'seriously flawed', and 'manifestly inadequate and unfair'. The government was made to do the consultation process again. The 'Talking Energy: The Future of Nuclear Power' process in 2007 found 45% of those involved to be in favour of new build nuclear power and 37% against. Of this process, the Nuclear Consultation Group, which Paul organises, stated: 'We are profoundly concerned that the assumptions that framed the questions asked by the government during the nuclear energy consultation were designed to provide particular and limited answers'. The UK Market Research Standards Board also declared that the public consultations 'were flawed', although the government stood by the evidence emerging from the process. In reflecting on these processes of public engagement in decisions over nuclear power Paul highlighted the necessary role of 'reflexive intermediaries'; the tendency for powerful interests to 'capture the argument'; the power differentials that exist; and the need in these debates to 'take the weaker side'.

After lunch Dr Tom Hargreaves (School of Environmental Sciences, UEA) switched the focus to public engagement with energy in the form of behaviour change in his paper 'Governmentality and energy use: behaviour change and the making up of energy citizens'. Observing that methodologically very few studies have examined the internal workings of attempts to change behaviour, Tom introduced the concept of governmentality to understand such initiatives as 'techniques (political rationalities or governmental technologies) used by political authorities to shape the interests of their subjects so that they align with their own'. He drew on two qualitative research projects: one focusing on a group-based behaviour change initiative in a workplace and the other on householders trialling a range of real time display monitors. In both examples he illustrated the disciplining role of these technologies of behaviour change – the sense of hierarchical observation, examination through audits, and the shaping of new categories of employee in the workplace; and the 'nag factor' and big brother surveillance of energy meters. He also illustrated the many forms of resistance to these technologies such as clever excuses in the workplace or internal battles over switching the lights off and on in the home. Tom concluded by arguing that energy behaviour change initiatives can be seen as a new form of social control that attempt to 'make up' energy citizens. This raises critical questions such as: What kinds of publics are behaviour change initiatives making up? What alternatives are being shut out or ignored? Whose interests does this serve? How does this differ in different times and places? Should we pay more attention to the nature of environmental resistance?

In his talk on 'Civil society engagement in alternative energy pathways' Dr Adrian Smith (SPRU, University of Sussex) went on to directly consider the question: what is the relationship between different forms of citizen-led or uninvited engagements in energy-related issues and the trajectories of energy innovation pathways? His main focus was on a 'relatively small part of civil society': people trying to develop alternative energy

pathways themselves, in the tradition of the alternative technology movement. He traced this movement back to its radical roots in the 1970s where the literature (such as *Soft Energy Paths* by Amory Lovins) and early community energy groups such as the *Northumbrian Energy Workshop* (NEW) finds echoes in contemporary images of transition towns, decentralised energy advocacy, and the emerging professional and corporate interest in energy alternatives. Dominant, centralised, large-scale energy 'regimes' exhibit path dependencies that are hard to unsettle and displace, however. Adrian suggested that these energy regimes need unsettling - but how? He discussed two possible strategies to carve out spaces for alternatives: (i) to forge alliances with more powerful constituencies and develop protective spaces for alternative networks to flourish; or (ii) creating spaces and opportunities for alternatives through more direct forms of civil society protests and activism. Adrian outlined the need to bring these elements together in an integrated heuristic framework of socio-technical energy transitions, and said that we have the analytical tools to do this from both social movement theory and niche theory.

## Workshop discussion

During workshop discussions participants were struck by the multiple meanings of public engagement at play in the energy domain, moving beyond formal invited engagement to embrace a diversity of more organic uninvited processes as well as continual public connections with energy technologies in everyday life. Some participants commented on how this was very different to the constrained visions of innocent citizens and formal invited engagement that predominated discussions on nanotechnology in the second seminar in Durham. A few participants thought that the broadening of meanings of engagement could create a 'bloated concept' that becomes meaningless and not particularly useful. Others countered this by suggesting that these meanings already exist and are roots through which publics are expressing concern and having agency. Even where publics are not actively present they still exert influence through being imagined and constructed in various ways and these visions need to be better understood.

This opened up some highly productive and insightful discussions about the distinctions, connections and interrelations between invited and uninvited spaces of engagement. In many ways there are inherent linkages between the two. One group considered how uninvited engagement has led to and paved the way for institutionalised and formalised invited processes. In same way as Adrian noted for community energy technologies taken up by professionals and companies, many 'democratic innovations' and public participation experts (mediators and facilitators) that now make up the emerging global public participation industry began life in grassroots settings and uninvited spaces of activism and community development. While useful as a heuristic device in seminar discussion, here the uninvited/invited distinction was shown to be over simplistic in not faithfully representing the fluid, complex and diverse realities of public engagements around energy. Others acknowledged that there has always been fundamental conflicts between the two – invited spaces of engagement are used tactically, strategically and politically to counteract or co-opt uninvited engagements. At the same time, a few participants noted that uninvited spaces of engagement are often not as 'democratic' as they are made out to be. For example, in terms of representation they can often be highly exclusive, occupied by those who have the necessary time and resources, and not reflective of the various communities in which they are situated.

The broader, more holistic, perspective taken in the seminar also highlighted the need for more integrated studies that work across diverse spaces of engagement, develop comparative analyses, but also move towards an integrated framework that pays close attention to the various geographies of these spaces of engagement and participatory modes of knowledge production vis-à-vis the energy system and innovation pathways over time. This would provide a richer and more realistic sense of the multiple interactions and transformations within and between diverse 'ecologies of participation'. As more than one participant pointed out, this more holistic view of participation gives us a better sense of the coproduction of the 'democratic innovations' that often go hand in hand with technical and social innovations within this wider system. Finally, it was also pointed out that such an overview also problematises the positionality and roles of different actors, including critical social scientists, within this wider system. Here critical public engagement with energy also means being reflexive in relation to our own assumptions, roles, positionality and identities, in addition to those of others.

Yet for all the talk of proliferating spaces of public engagement with energy, it was also argued that many publics remain disconnected and disengaged – energy is invisible to them and they have no immediate connection with it (as is the case with the passive consumer who pays their energy bill by direct debit and never thinks about where it comes from). The question is when and where do people become engaged with energy and why? As in previous seminars there was a questioning of the rationales of public engagement. It was argued that the dominant way government uses engagement for instrumental reasons, to inform the public or enhance acceptance of potentially controversial technologies, has created a new 'deficit model'.

The workshop was brought to a close with some final reflections from Andy Stirling. He noted that two distinctive features of this seminar compared to the others in the series (and most previous discussions on participation and engagement) were that we had sought to get under the skin of the particularities and materialities of energy vis-à-vis public engagement, and that energy allowed us to explore the full spectrum of engagements at play including uninvited ones that are not normally brought to the party. Energy had forced us to think differently about participation and engagement. Andy noted, however, that what really mattered is the contingent fact that energy pushes upon us the huge and complex task to transform the system. Listening across all the talks and discussions Andy was struck by the sheer variety of forms and sources of public legitimacy or authority in processes of social innovation and transformation. He noted many (and key thinkers or leaders relating to them) including: "trusted judgement" (Augustine); "essential interests" (Machiavelli); "professional service" (Cromwell); "accountable representation" (Jefferson); "innocent citizenship" (Rousseau); "formative competence" (Brunel); "plural perspectives" (Dewey); "ideal speech" (Habermas); "diverse knowledges" (Feyerabend); to name but a few.

Andy argued that all these sources of public legitimacy and authority are at play in moves to transform the energy system and are implicated in specific design processes. These insights, and opening up the frame of public engagement in the seminar, illustrated that critical public engagement needs to focus on dynamic, holistic, and contingent ecologies of processes, institutions, and discourses, not static definitively optimal designs. Any sense of 'critical' public engagement also needs to look reflexively beyond 'change through stating criticism' (which is academically instrumental) to an understanding that an instrumental transformative agenda can be a fulcrum for more radical transformative change.

## Workshop programme

### **Participation, power and sustainable energy futures 26th October 2010, SPRU, University of Sussex**

- 10.30 Registration, SPRU – University of Sussex
- 11.00 **Welcome and Introduction**  
Professor Andy Stirling (Director of Research, SPRU, University of Sussex)  
Dr Jason Chilvers (School of Environmental Sciences, UEA)
- 11.20 **Critical public engagement and sustainable energy**  
  
'Public engagement in the low(er) carbon energy system: diversity, materiality, agency'  
Professor Gordon Walker (Lancaster University)
- 11.50 **Critical engagement and energy policy**  
  
'Lessons from CoRWM'  
Professor Gordon McKerron (SPRU, University of Sussex)  
  
'Nuclear Consultation: rhetoric and practice'  
Dr Paul Dorfman (Warwick Business School, University of Warwick)  
  
Discussion
- 13.00 Buffet Lunch
- 14.00 **Critical engagements on behaviour change**  
  
'Governmentality and energy use: behaviour change and the making up of energy citizens'  
Dr Tom Hargreaves (School of Environmental Sciences, UEA)
- 14.30 **Critical engagement in alternative sustainable energy pathways**  
  
'Civil society engagement in alternative energy pathways'  
Dr Adrian Smith (SPRU, University of Sussex)
- 15.00 Tea/Coffee
- 15.15 **Workshop discussion - two breakout groups**
- 16.15 **Plenary discussion**  
  
**Final reflections**  
Professor Andy Stirling (Director of Research, SPRU, University of Sussex)
- 5.00pm **Close**

## Workshop participants

Richard Bull	De Montfort University
Jason Chilvers	University of East Anglia
Matthew Cotton	University of Exeter
Paul Dorfman	University of Warwick
Carina Fearnley	University College London
Lindsay Galbraith	University of Cambridge
Tom Hargreaves	University of East Anglia
Sabine Hielscher	SPRU, University of Sussex
Suzanne King	People Science & Policy Ltd
Markku Lehtonen	SPRU, University of Sussex
Gordon McKerron	SPRU, University of Sussex
Alison Mohr	University of Nottingham
Helen Pallett	University of East Anglia
Tom Roberts	CSEC, Lancaster University
Jay Redgrove	Nuclear Decommissioning Authority
Kirsten Reeves	DEFRA
Christopher Shaw	University of Sussex
Adrian Smith	SPRU, University of Sussex
Peter Simmons	University of East Anglia
Sigrid Stagl	Vienna University of Economics and Business
Andy Stirling	SPRU, University of Sussex
Paul Upham	University of Manchester
Gordon Walker	Lancaster University
Diane Warburton	Shared Practice
Tina Wegg	University of East Anglia