

## MAKING ENERGY RESEARCH MORE RESPONSIVE: PUBLIC DIALOGUE AS EXPERIMENT

The UK [Civil Service Reform Plan](#) includes a commitment to embedding systems that are open to a broad range of inputs, including those of the public. Public responsiveness is therefore recognized as a key characteristic of good governance including in the field of science and technology policy-making. Since the influential 2000 '[Science and Society](#)' report from the House of Lords Select Committee on Science and Technology, research councils and Government departments have sponsored dialogues around several prospective technologies and associated policy options including the commercialisation of genetically modified crops, stem-cell research, nanotechnology and synthetic biology. In light of the commitment to open policy-making, what, then, are the prospects for public dialogue in making research policy more responsive?

In recent years public dialogue activity in the UK has seen a turn to novel processes to explore public preferences and priorities on a range of science policy issues. Two notable examples include the DECC [Energy 2050 Pathways](#) dialogue and the BBSRC [Bioenergy Distributed Dialogue](#), both co-sponsored by [Sciencewise](#), the UK Government's centre for public dialogue in science and technology policy making. Both represent a move away from traditional methods of public engagement that involved commissioning market research bodies to bring together a representative sample of the population to provide a snapshot of majority public opinion on (usually) the social and ethical dimensions of an emergent area of science or its technological applications.

But what do these recent examples reveal about the act or process of being responsive to the public or the public interest? More specifically, how can the notion of *public dialogue as experiment* help us think about this question? In this post, I want to explore three preconditions for experimentation to take place and their relevance for these energy dialogues.

### Three preconditions for *public dialogue as experiment*

Historian of science Hans-Jörg Rheinberger defines experimentation as "[a permanent process of reorientation and reshuffling of the boundary between what is thought to be known and what is beyond imagination](#)". So, the first condition for dialogue to be truly experimental is the capacity to *embrace the unexpected*. It is important that dialogue processes remain open to the unexpected inputs which arise because publics act or respond in different ways to the particular circumstances of a dialogue.

Second, public dialogue as experiment is dependent upon *diversity of perspectives*. Though my colleagues and I have previously noted that interaction between diverse perspectives is an important principle of public dialogue, we stress that [diversity of perspectives is an outcome of the process of dialogue rather than something that pre-exists it](#). Without diverse (even conflicting) views, dialogue intended to feed into science policy discussions is unlikely to produce new forms of meaning and understanding.

Third, the emergence of novel ideas depends upon the *responsiveness* of research and policy decision-makers: the capacity to be aware and considerate of others' ideas and values, and to have that awareness influence their responses. In the absence of such awareness or willingness to modifying their opinions, decision-makers cannot claim to be responsive.

Turning now to the Energy 2050 Pathways, its interface with the public is mainly via the My2050 online simulator. This allows members of the public to submit their own visions of future pathways for low-carbon energy transition. The project also included a series of dialogic workshops with community leaders or [civil society publics](#), with a significant stake in mobilising [latent and diffuse publics](#) to act on climate change.

In practice, the potential of My2050 as an experiment seems to be hampered by the notion that public engagement is simply a process for eliciting fixed public opinions (e.g., via a representative sample) on ways of meeting a given policy target (e.g., 80% reduction in carbon emissions by 2050). Such a process imagines the public as a helpless 'dupe', to use Don Slater's term. It assumes this public is swept up by the force of innovation, unable to pose questions about different technological options and alternative low-carbon pathways. In reality, some community leaders with a professional stake on the issue verbally challenged the policy consensus by asking questions such as "do you want me to portray the future of the UK energy system how I see it or do you want me to portray how to achieve this artificial 80 percent thing that I don't believe in?". So, while My2050 allowed users to construct their own pathways, it set some fixed parameters that effectively excluded some publics and alternative visions.

By contrast, the Bioenergy Distributed Dialogue offers some hope for dialogue to play a role in a policy process responsive to alternative visions of our energy futures. Through periodic exposure to different public views, the dialogue aimed to [encourage the scientific community and BBSRC bioenergy strategy and policy developers to be responsive to public opinion](#). The publics engaged in the experimental process were predominantly highly educated science students or professionals (i.e. [civil society and campaigning publics](#)); accordingly, participants felt able to challenge, for example, the dominant research policy frame of large-scale commercialisation of bioenergy production by expressing hope for the potential for decentralised generation of bioenergy.

The Bioenergy Distributed Dialogue process enabled the public to challenge the narrow framing of the technology in isolation, asserting that this excluded consideration of how bioenergy fits into wider debates on cutting carbon emissions, the need for a diverse energy mix to meet future energy needs and the need to manage energy demand. In these public responses, we see evidence of the antithesis to Slater's 'dupe', his rational 'hero': a public figure that actively and autonomously defines its own needs and transforms these into demands to exercise freedom of choice. Given that the dialogue findings were only published late last year, it remains to be seen whether BBSRC energy research policy will be, in the words of one BBSRC representative, "responsive to what people are saying"

### **An energy research system responsive to the public interest?**

In conclusion, did the processes underpinning the Energy 2050 Pathways and Bioenergy Distributed Dialogue create the necessary conditions for experimentation and, hence, responsiveness?

- Both dialogues aimed to encourage deeper personal reflection among policy-makers through periodic exposure to different public views that had the potential to evolve over time and space in response to changing social and legislative environments. Yet, in practice, the My2050 online simulator lacked the capacity to embrace any unexpected inputs that did not comply with its fixed parameters.
- Both processes were also constrained in various ways from capturing perspectives that could produce new meanings and understandings of the issues surrounding alternative energy futures; although the dialogue activities of both did enable those public voices with a clear stake on the issue to question dominant policy frames as well as established norms of energy use.
- Because of its focus on dialogue, the Bioenergy Distributed Dialogue was able to create a capacity for awareness and consideration of the publics' ideas and values that was not possible in the context of the fixed parameters of the My2050 simulator.

So what lessons can be drawn from these experiments in making energy research more responsive? A more responsive energy research system might allow visions of fundamentally altered energy infrastructures and their associated ways of living, instead of enforcing the predominant vision of simply adjusting technology mixes to meet presently established norms of energy use. Thus a responsive research policy process is one that seeks to be *improved* as it encounters and accommodates diverse public views.

On 3 April 2014, I will be speaking at the '[Making Energy Publics](#)' workshop in London, co-hosted by the Open University's [publics then, now & beyond network](#) and the [3S research group](#) at the University of East Anglia. My talk will be exploring these issues further to better understand both how publics are made and how the energy system itself is made public through the process of dialogue as experiment. This post expands on some ideas that were first developed in collaboration with colleagues, Dr Sujatha Raman and Beverley Gibbs, whose input I gratefully acknowledge.

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