

Case Study

Bioenergy distributed dialogue

An ongoing public dialogue to inform strategy in bioenergy research funding

Vital statistics

Commissioning body:

Biotechnology and Biological Sciences Research Council (BBSRC)

Duration of process:

20 months: September 2012 – April 2014

Total public participants involved:

162 public participants attended and provided feedback from 11 events

Total specialists involved in events:

35 organisers provided feedback from the 11 events. The majority of these were BBSRC funded researchers

Cost of project:

£91,361 total cost,
Sciencewise co-funding = £52,295

The Biotechnology and Biological Sciences Research Council (BBSRC) is committed to ensuring that the research it funds is not only communicated openly, but is aligned with the wider social context, including ethical issues.

Bioenergy (as part of industrial biotechnology and bioenergy) is a strategic research priority for BBSRC. The UK has committed to meeting international targets for reducing carbon emissions and industrial biotechnology is believed to offer novel solutions through the use of plants, bacteria, algae and fungi as non-fossil sources of renewable energy: bioenergy.

There is potential for major scientific and technological advancement in the bioenergy area. However, its production must be socially, economically and environmentally viable to be effective as a significant contributor to the UK energy mix. BBSRC, on behalf of the UK Research Councils, undertook this dialogue to help ensure that contemporary public views, concerns and aspirations were taken into account by research funders and researchers as more bioenergy solutions are developed.

The public dialogue was novel in seeking to develop an ongoing and open process of dialogue around bioenergy research.

Policy maker view

“ It’s good that some of these higher level issues have come out. I think when you are developing research, you don’t think about them. Scientists might be surprised that people are concerned that the benefits won’t be fairly distributed. This might be quite a political thing to say. This might make policy makers think about this a bit more. ”

BBSRC advisory panel member.

Influence on policy and policy makers

It is not yet possible to fully assess the impact of the bioenergy dialogue on BBSRC decision-making. BBSRC took a deliberate decision to limit publicity and to delay discussion of the results until the evaluation was available, given that the dialogue was a pilot. However, many of those interviewed as part of the evaluation acknowledged that the dialogue report makes a useful contribution to understanding how dialogue can provide insights into public views about science.

“ The [dialogue] report is a good read. I am trying to balance my critical edge with saying that there are some really good things in it. BBSRC are talking a lot about being open – that means listening to people as well as talking to people. That’s a really good thing. ”

BBSRC advisory panel member.



Background

BBSRC saw bioenergy as an area of research that could potentially provide a significant response to the challenges of sustainable energy production in a low-carbon economy. Industrial biotechnology and bioenergy (IBBE) is one of three BBSRC strategic research priorities and a number of large investments have already been made.

- A £24 million investment in the BBSRC Sustainable Bioenergy Centre (BSBEC)
- A £6 million investment in an Integrated Biorefining Research and Technology Club in partnership with the Engineering and Physical Sciences Research Council (EPSRC) and a consortium of businesses
- An £18 million investment in BBSRC Networks in Industrial biotechnology and Bioenergy (BBSRC NIBB). With EPSRC, 13 collaborative networks were funded to boost interaction between the academic research base and industry
- IB catalyst will be jointly funded by Innovate UK (formerly the Technology Strategy Board) and EPSRC –£45 million has been committed to support major integrated research projects in IBBE.

There are seen to be many options for the application of bioenergy research. BBSRC considers it to be important that the field remains responsive to public needs and concerns as the science develops. In recent years, BBSRC and other research councils have tended to use large-scale deliberative dialogues.

BBSRC has recognised the many advantages of these large-scale deliberative dialogues, not least the robust and defensible evidence base that is generated. However, such dialogues have limitations including:

- lack of flexibility
- audience confined to representative groups
- limited number of researchers who can be involved
- their ‘top-down’ nature, which does not encourage spontaneous adoption by researchers, public engagement professionals or others.

BBSRC decided it would be valuable to explore the possibilities of using a different dialogue model that tackled these limitations – hopefully without losing the advantages of the large-scale deliberative model.

The dialogue results have been considered by BBSRC’s Bioenergy Champion, Sustainable Bioenergy Outreach Group, Industrial Biotechnology and Bioenergy Strategy Panel, and its Bioscience for Society Strategy Panel. Members of the latter Panel felt that the dialogue report provided a lot of good material.

A more immediate practical outcome has been that one organisation, which is working to provide information on sustainability in farming, has been in touch with BBSRC as a result of reading the report. There is potential for further interest from stakeholder groups when the report is disseminated more widely.

Researchers and others who ran events mentioned many positive impacts for their own teams, including better understanding of the role and value of dialogue and increased skills. Event organisers were unanimous in saying that they would be willing to participate in this type of activity in the future. However, at present, it is not clear how the results of the dialogue events are being used to inform bioenergy research in the institutions where they were held.

Key messages from the participants

Overall, many participants saw bioenergy as a key part of, but not the entire solution to, energy needs in the future. Respondents were positive about the range of potential uses of bioenergy and saw a key place for bioenergy as part of a suite of renewable energy sources. This will help to reduce the use of fossil fuels and, thus, reduce carbon emissions. Some noted its potential for use in power for transport, while others pointed to its use in recycling waste. The potential for bioenergy to allow for decentralised power generation was also seen as a positive aspect of this energy source.

“ It provides an environmentally sustainable alternative to fossil fuels, and is renewable. ”

Public participant.

“ It is an important part of our energy mix and especially to meet our 10% energy from renewables by 2020 in line with the emissions targets. ”

Public participant.

Public concerns included whether the gains from bioenergy use would be spread fairly among all those involved in, and affected by, its production. The potential range of negative impacts was a worry for many – in particular, the consequences for land use, food production, biodiversity and the environment more generally. Participants thought that there was potential for those who were already poorest to suffer the most from any such impacts.

Another strand of concern related to how bioenergy fitted into the wider debate around cutting carbon emissions and diversification of the energy mix. Some worried that it could be used as ‘greenwash’, while others thought it was distracting from the need to reduce energy demand. Other concerns related to the ability of those taking decisions around energy to plan wisely in the long-term to:

- ensure impacts are acceptable
- cooperate internationally to allow for efficient and speedy progress in the use of bioenergy.

Public participants were keen to ensure that researchers were thinking about the ‘bigger picture’ issues of benefit and fairness, impact and sustainability, and did not lose sight of the wider goal of reducing carbon emissions through both demand and supply-side mechanisms.

They also suggested that researchers should be transparent in their work on bioenergy and, where possible, make efforts to inform the public about their work and provide high-quality evidence to politicians to enable good decision-making in this area.

The dialogue activities

The key objectives for the elements of the dialogue covered by the Sciencewise grant were:

- to develop a novel, flexible model for dialogue that can adapt to the changing science, and to the evaluation and outputs of the public engagement activities during the lifetime of the dialogue

- to use that model of dialogue to engage in an ongoing and evolving conversation between BBSRC, its research community and a range of stakeholders, including members of the public, around bioenergy research, its potential, its application and the issues associated with it
- to provide a positive experience of dialogue for all those involved so that those people, from members of the public to researchers and policymakers, are better informed when making decisions about bioenergy.

BBSRC adopted a distributed dialogue model, new for the research councils, to create a more flexible approach to public engagement on bioenergy and the issues that surround it. Rather than engage an external contractor to run the dialogue, BBSRC employed its own Dialogue Co-ordinator to oversee the project and support the event organisers. The project also developed a ‘toolkit’ in collaboration with academics, science communicators and the New Economics Foundation (nef) that could be used when running dialogue events. Events could then be run by BBSRC-funded researchers, colleagues at BBSRC-funded institutes or community and special interest groups, as well as by BBSRC itself.

The toolkit included:

- guidelines for running an engagement event
- a set of future scenarios and associated discussion materials
- a Democs card game.

The future scenarios, set 20 years ahead, were designed to encourage discussion by being provocative projections of what the future might look like if particular decisions are taken concerning the use, or non-use, of bioenergy in the UK. The scenarios use stories and scripts for short plays involving fictitious characters. ‘Cue cards’ and ‘Character cards’ provide additional prompts to engage participants in the discussion. The guidelines on running a relevant dialogue event were also specially produced for the project.

Democs card games are designed to help small groups of people engage with complex topics. A bespoke version on bioenergy was produced for the dialogue project to give participants information, and a structure to share and feedback ideas on bioenergy.

The main mechanism for feedback was through forms completed by participants and organisers at the end of each dialogue session. These forms were returned to BBSRC and were independently analysed and reported by Ipsos MORI. Written feedback was received from 162 public participants and 35 organisers. The feedback forms captured:

- views and opinions of participants on bioenergy
- demographic information about participants
- information about the event itself
- information about the process of the dialogue (for example, how the materials were received)
- participants’ perceptions about what the impacts of the dialogue might be.

The distributed approach relied on researchers and other interested groups to run events. As a result, participants were self-selecting and not necessarily representative of the UK population as a whole. Therefore, it was particularly important to contextualise the results so that demographic information from participants could be gathered to gain an understanding of who had been engaged.

The BBSRC Sustainable Bioenergy Outreach Group and a specially convened Process Sounding Board provided oversight for the dialogue.

Prior to running the public events, a training event for potential event organisers was held in London. By the end of the project, 11 public dialogue events (typically lasting two hours) had been run by researchers and other groups between January and September 2013, including a pilot session in London. In the London pilot, five out of six groups used the future scenarios, and one group used the Democs cards. In three of the subsequent events, the participants used the Democs cards to explore the issues. In all others, one of the scenarios was used.

What worked especially well

It was a considerable achievement to get researchers to independently organise and run eight events within a period of about six months. Bioenergy researchers fed back that they were keen to get involved in the events and their specialist input was appreciated by participants. If the bioenergy dialogue were to continue, it was expected that more researchers and engagement experts would hear about it and want to run events.

The approach has enabled BBSRC to tap into a strong vein of interest on the part of researchers and academic institutions in developing two-way conversations about science with members of the public. Several of those who ran dialogue sessions expressed an interest in continuing to run this kind of activity.

The particular strengths of the design of the bioenergy public dialogue included:

- the bioenergy dialogue approach is seen as novel and more engaging for many of the audiences that universities work with (such as local people associated with academic or technological occupations or local science societies), who are keen to have hands-on activities and interaction with researchers
- the toolkit was an attractive resource for busy organisers, providing them with activities and all the materials they needed. This meant that BBSRC could go to researchers and invite them to get involved without having to take up too much of their time
- the right kinds of resources were provided for people organising dialogue events – support from the Dialogue Co-ordinator at BBSRC, the toolkit and some funding for refreshments.

What worked less well

It took time to get the dialogue embedded in existing governance structures within BBSRC. This limited the practical oversight provided and while a number of bodies had an interest in the dialogue, none met regularly enough to provide timely oversight and advice. Key decisions about target audiences, sample size and how to increase the number of events being organised were not fully addressed by the oversight groups. Ultimately, this had an impact on the robustness of results.

Whilst the dialogue reached a similar number of people as other dialogues, participants were mainly made up of people who were professionally involved in science or already had an interest. There was little involvement of the wider public or hard-to-reach groups. Given the limited range of participants, the results could

not provide information about the views and attitudes of a cross-section of the UK public. However, they did reflect the attitudes and opinions of a certain sector of the population that was generally more engaged with science issues and with the topic of bioenergy.

Some participants and event organisers expressed concern that the lack of time and depth of discussion in the dialogue events meant that members of the public were not in a position to provide the kind of feedback that BBSRC was looking for. One two-hour session was seen to be too little time for members of the public to explore a topic like bioenergy in sufficient depth to be able to give a considered opinion on it. Equally, it was felt that many members of the public may not have wanted or been able to attend sessions lasting more than a few hours, which is why recruited processes usually offer a small payment as an incentive. In future, more attention needs to be given to ways of balancing the need for allowing sufficient time for dialogue with the desire to create an open process in which many people can be easily involved.

Many of those organising dialogue events were not trained in engagement or dialogue. Several reported having difficulty in managing sessions (for example, managing people who dominated discussion groups and recording conversations). This meant that the events may not have delivered the expected results in terms of capturing the full range of participants' views on bioenergy.

Contact Details

Commissioning body

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Ipsos MORI

Toolkit materials

The future scenarios were originally developed as part of an academic report¹ and adapted for use in the toolkit by Ray Mathius

Guidelines for events: Ray Mathius

Democs kit on bioenergy: New Economics Foundation and Edinethics

Evaluator

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Full project and evaluation reports available from Sciencewise on www.sciencewise-erc.org.uk/cms/bioenergy-distributed-dialogue/

¹. BBSRC Sustainable Bioenergy Scenario Tool, R Dingwall, A Balmer and M Goulden (2011)