

# sciencewise NEWS

September 2009

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## 'Green villages, towns and cities'

Thanks to support from the Sciencewise-ERC, public dialogue conducted by the Department of Energy and Climate Change (DECC) and Ipsos MORI has led directly to the Government committing £10 million in funding to an innovative new 'Green villages, towns and cities' initiative.

The 'Big Energy Shift' citizen dialogue explored public attitudes to new technologies, and the barriers and motivators to changes in the way we insulate, heat and power our homes and communities. The findings published in June 2009, revealed huge potential for people to change their energy behaviours, and overwhelming support for Government taking decisive action. Householders believed that Government should nudge forward behaviour change by making it easier for people to take up new options. For example, by providing smart meters and better advisory services, by reducing upfront costs, by normalising technologies to reduce the fear of the unknown and by designing aesthetically 'mainstream' looking energy systems to appeal to homeowners' tastes.

These recommendations went beyond previous research into energy technology. As well as identifying views

on new technologies, the dialogue has identified the steps that Government, consumers and business could take to fundamentally shift householders' energy behaviours.

This has had a direct impact on policymakers. During fieldwork, DECC and stakeholders from Government, business and the local community talked and debated directly with participants, which embedded the debates from the dialogue in ongoing policy discussions. The report has been circulated widely, and many stakeholders fed back that its analysis and recommendations provided important food for thought in this emerging policy area.

Ultimately, the report has influenced the Department's Renewable Energy Strategy and UK Low Carbon Transition Plan, published 15 July 2009. Joan Ruddock, Minister of State, made the role of the citizen dialogue in the new policy explicit, in a letter to participants. "Over the last few weeks, Ministers and officials from Government have been reflecting on what you said ... The 'Green villages, towns and cities' challenge is a direct result of your contribution to the Big Energy Shift. We are grateful to you for your help."

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The Transition Plan commits to policy initiatives informed by the householders' views, including 'pay as you save' pilots, helping people defray upfront costs, and consultation on a 'clean energy cash-back' scheme to help people and businesses generate low-carbon energy.

In addition, the Government wants to take community transition to the next level, announcing £10 million for 'Green villages, towns and cities' – a challenge for communities to be at the forefront of pioneering green initiatives. Around 15 communities will be selected to participate as 'test hubs', with local residents, businesses, and the public sector playing a leading role, and eco-towns will be invited to participate. Participants will work together to develop community-wide plans for their neighbourhoods and learn how different initiatives – for example in energy and water conservation, or travel – work together in practice. They will be encouraged to explore new approaches to delivering to vulnerable groups by overcoming the particular barriers they face; and to share learning between the 'hubs' as part of a wider citizen-led pilot. If successful, the Government can use what is learnt to help roll-out a nationwide plan, potentially helping every city, town and village make the transition to a sustainable future.



# Summer of Science

It's been a busy time for the BIS PR campaign Science: [So what? So everything]

We may not have had a barbecue summer but the Science:[So what? So everything] campaign has been sizzling away nicely during the holiday months and making the headlines in national and regional media.

## Moonbounce

To commemorate the 40th anniversary of the Moon landing the campaign teamed up with Jodrell Bank Observatory to launch a competition to bounce a message off the moon.

Five winners, including Jack Walsh (age 6) and Ayesha Ghose (age 6), beat over 300 entrants, with words they would have used as the first person on the Moon. Their words were turned into radio signals and, using Jodrell's 32-metre Telescope at Cambridge, transmitted towards the Moon and reflected off its surface

The messages were just part of a sell-out event held at the University of Manchester-owned facility in Cheshire which was attended by 200 people and achieved massive regional coverage in the North West.

## Questions kids ask

The campaign is revealing the science behind our everyday lives, helping parents answer their kids' tricky questions.

The campaign conducted a national poll and revealed that 80% of parents have been left stumped by the science questions their children have asked them, with a fifth of parents left feeling silly as a result.

The research from Science: [So what? So everything] found that the top three questions that parents have been asked by their kids are "where do babies come from?" (60%), "what makes a rainbow?" (43%) and "why is the sky blue?" (30%).

Over half of the parents polled said they think that their children know more about the science behind the way things work than they do.

The campaign also launched a new section of its website that helps parents of young children answer some of the trickiest questions their children ask, as well as providing information about things to do in their area.

The Minister for Science and Innovation and father of five, Lord Drayson said:

"Like all parents, I've had to cope with many questions from my children. The Science: [So what? So everything] website will help parents get ready for the onslaught of questions their kids throw at them and fuel their children's curiosity at the same time."

## Hit the beach!

With UK seaside holidays on the rise this year, the Science: [So what? So everything] campaign hit the beach to offer fantastic science demonstrations for all.

The science seaside tour took place at six popular UK seaside resorts where teams of scientists (members of STEMNET's ambassador network) took a day off and showed passers-by exciting demonstrations, explaining the science behind the experiments, whilst teaching the public how to do them.

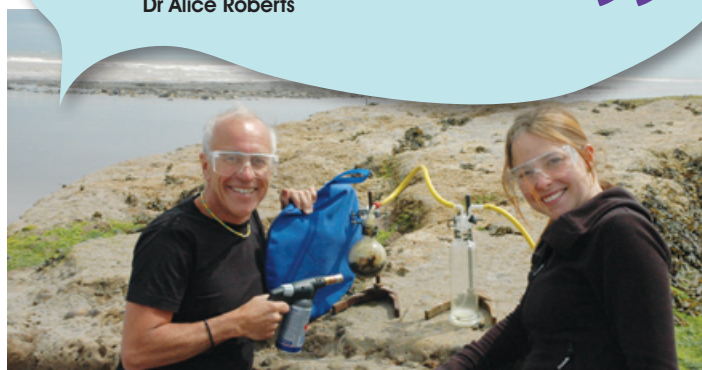
Dr Alice Roberts, TV presenter, anatomist and biological anthropologist, said:

“I am delighted to be supporting the Seaside Science Tour, as part of my involvement in the Science: [So what? So everything] campaign. Science and technology may not be the first things you think of when you visit the seaside, but it’s everywhere you look, from the biology of rock-pools and the geology of cliffs, to the invention of the hovercraft, and the potential for harnessing the energy of waves and wind.”

With the success of the summer, the Science: [So what? So everything] campaign is now planning for further activity to wow the public in autumn and winter. Visit [www.direct.gov.uk/sciencesowhat](http://www.direct.gov.uk/sciencesowhat) to find out more.

“ The coast is a natural laboratory, and I hope these live, seaside experiments will spark interest with families to get involved with science, and even inspire the scientists of the future. ”

Dr Alice Roberts



## New Project – Synthetic biology

Sciencewise-ERC is pleased to announce support for a new public dialogue project on synthetic biology. This project is commissioned by BBSRC (Biotechnology and Biological Sciences Research Council) and EPSRC (Engineering and Physical Sciences Research Council).

Synthetic biology is an area of research attracting increasing interest not only from the scientific community but also the wider public. It is defined by the Royal Academy of Engineering as ‘the engineering of biologically based parts, novel devices and systems as well as the redesigning of existing, natural biological systems’. Though the techniques underpinning synthetic biology are relatively old, the emergence of the field can be seen as happening within the last five years, and it continues to develop.

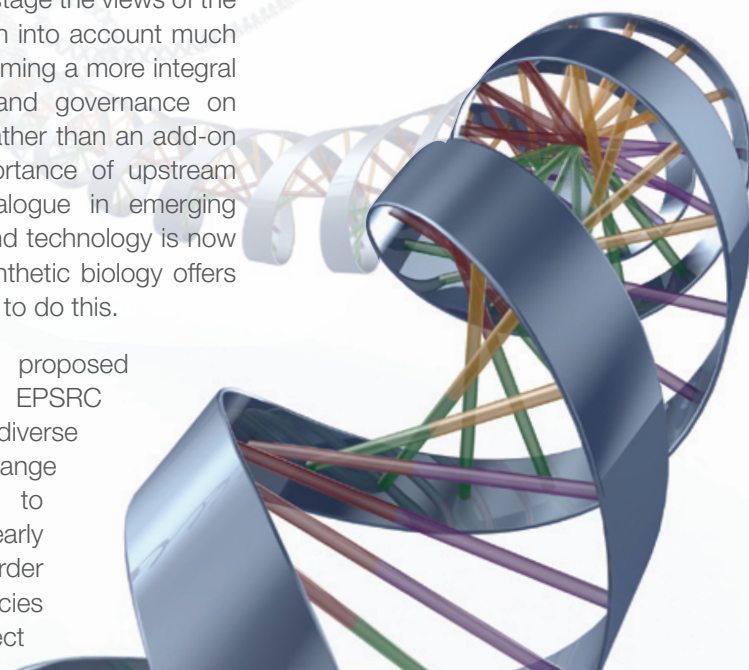
A number of organisations have already carried out work on aspects of policy, public engagement and dialogue in the area of synthetic biology. These include the Royal Society, NESTA, the ESRC Genomics Network and, the Royal Academy of Engineering, who published a report earlier this year which put forward a suggestion of some of the implications, opportunities and considerations for synthetic biology. EPSRC’s Social Issues Panel and BBSRC’s Bioscience for Society Panel have been working together to consider the societal issues around synthetic

biology for some time and recognise need for public engagement in this area. In February this year they set the wheels in motion for a public dialogue that will be the foundation of future public engagement.

The need for informed dialogue in areas of emerging science and technology, and particularly one that builds on the work of genetics, is highlighted by the experiences of the GM debate more than 5 years ago. Feeling around the public engagement programme ‘GM nation’, was that dialogue had taken place at a very late stage without real potential for the views of the public to inform policy. By conducting dialogue around synthetic biology at an early stage the views of the public can be taken into account much more broadly, becoming a more integral part of research and governance on synthetic biology rather than an add-on element. The importance of upstream and continued dialogue in emerging areas of science and technology is now recognised and synthetic biology offers a good opportunity to do this.

The project being proposed by BBSRC and EPSRC aims to allow the diverse perspectives of a range of UK residents to be articulated clearly and in public in order that future policies can better reflect

these views, concerns and aspirations. Encouraging increased participation from the scientific community in dialogue is one of the anticipated outcomes of the project, reflecting current discussion within the engagement community about the need for more involvement from scientists and researchers. The project will provide a foundation on which broader future engagement can take place and awareness will be raised within the Research Councils, policy makers and scientific community of the importance of dialogue in relation to this subject.



# Some feedback about feedback

**It's so satisfying to get first hand experience that reinforces the theory you've been espousing!**

This happened to me recently, in relation to a community engagement project which I've just started working on. The context is the long-term practical response to climate change - in this case, the way society responds to sea level rise and the likely increase in storms, on a particular stretch of Britain's coast.

The main organisation leading the work had a bit of a rocky start when its initial idea about changes to sea defences were published. One community member told me that his town felt "as if a bomb had been dropped on it", with, in his words,

"ordinary people being given a few short weeks to respond to a very technical document".

But my conversations with the people who will be most affected by the proposals revealed something rather magical about the way that the lead organisation has managed to get its act together on public engagement.

Consistently I heard that after a very poor start a few years ago, people are now feeling positive and appreciative of the much better way that they are being engaged.

What is it that has made the difference? The key seems to be the feedback that people are getting from the organisation,

## Departmental drop in

As of this summer, policy makers across Government have been offered a new service for direct support and expertise in the area of public dialogue delivery within science and technology.

Sciencewise-ERC has taken its monthly drop in sessions on the road, by offering policy makers the opportunity to attend sessions within their specific departments. These new departmental drop in events allow a more tailored session, structured to the individual characteristics and needs of each department.

A recent session hosted at the Department for Energy and Climate Change (DECC) attracted in excess of 20 policy makers all keen to hear about the value of public dialogue and what Sciencewise-ERC in particular can offer. Those who took part raised issues such as how to carry out dialogue on contentious issues and the challenge of getting stakeholders involved. One policy maker commented that the session had given them an understanding of the role of Sciencewise-ERC and it was very likely they would use the knowledge gained for an upcoming project. Another policy maker commented that they thought dialogue was important because it 'encourages better understanding and transparency'.

Drop in for Dialogue enables you to:

- get specific advice from a Dialogue and Engagement Specialist (DES)
- hear from others about their experiences
- learn from practitioners about current best practice in public dialogue



Over the next few months we hope to continue providing similar experiences within departments such as DH and DFID. If you are interested in us visiting your department, then please contact [Karen.Smith@aeat.co.uk](mailto:Karen.Smith@aeat.co.uk)

Previously, drop in sessions have been held at FutureFocus, Victoria St, and this service will also continue to be offered, with a number of upcoming sessions already planned.

### Upcoming sessions at Futurefocus:

- 24 September 2009 - Synthetic Biology Dialogue, presented by Dr Patrick Middleton, Head of Public Engagement, BBSRC
- 19 October 2009 The true costs and benefits of public dialogue, presented by Diane Warburton, Dialogue and Engagement Specialist, Sciencewise-ERC
- 14 December 2009 Partnership in Dialogue, presented by Andrew Acland, Dialogue and Engagement Specialist, Sciencewise-ERC

### Who are the sessions for?

These sessions have been designed specifically for those with a responsibility for, or involvement in, national science and technology policy making. This includes central Government and its agencies, and executive, advisory and non-departmental public bodies. Drop in sessions are only open to these individuals, so it is a safe environment in which to share experiences and discuss issues for potential dialogue.

which demonstrates that the organisation has actually heard what they said.

These people feel listened to because of two kinds of feedback. Firstly, they can see how the proposals have actually changed to take account of their needs and concerns. Secondly, where the proposals haven't changed, they were told clearly why this wasn't possible or why the organisation has chosen to give more weight to an opposing need, concern or constraint.

So that's the insight which backs up the theory.

“ When you have asked people for their views, tell them what's changed about your proposal or decision as a result of their input, and tell them why other aspects have not changed.

You'll be amazed at how powerful this simple discipline can be. ”

Penny Walker, Sciencewise-ERC Dialogue and Engagement Specialist

## Best Practice for Dialogue – New tools

**Following considerable research by our Dialogue and Engagement Specialists (the DES team), the results of the six strategic research topics are now due for release.**

Each in depth study has been taking place on different areas which are perceived to pose particular challenges for policy makers when planning and delivering a public dialogue project. The primary aim of the research is to provide policy

makers in central Government departments and agencies with practical tools and guidance to address these challenges.

Within the science communication arena, public dialogue represents a relatively new form of engagement, and it is therefore vital that we use the most up to date thinking as well as sharing best practice. In this way, policy makers can be assured that they are delivering their dialogue in the most effective way.

The research topics that have been investigated are:

- **The Use of Experts in Public Dialogue** = how to enable 'expert' advice to be effectively used at all stages of public dialogue
- **Widening Public Involvement in Dialogue** = the why and how of undertaking larger scale engagement projects which use 'up-scaled' dialogue techniques
- **Evidence Counts – Understanding the Value of Public Dialogue** = assessing the methodologies of evaluation and the impact on policy and participants
- **Departmental Dialogue Index** = assessing a Department's propensity to engage with the public and ensuring that the approaches used in the dialogue are fit for purpose
- **Working with the media** = understanding media perceptions of dialogue and developing strategies to promote it effectively
- **Enabling and Sustaining Citizen Involvement** = how to enable and sustain citizen involvement

The research process has involved literature research as well as talking to a range of people, those in Government who have been directly involved in some form of public engagement, those who have knowledge of dialogue and engagement theory such as academics, and also science communicators.

Two dedicated workshops have also taken place, one in March 2009 and one in October 2008, both of which sought to debate each of the research areas. Delegates were invited to take part in small discussion groups on each of the topics, discussing their experiences of dialogue within policy-making.

Going forward, it is hoped that this research will provide all those involved in the dialogue planning and delivery processes with additional tools and expertise needed to deliver professional and effective dialogue.

Summaries and full reports will be available in the Autumn on the Sciencewise-ERC website [www.sciencewise-erc.org.uk](http://www.sciencewise-erc.org.uk)

# 'Public Dialogue – Making a difference'

An event from Sciencewise-ERC and the Hansard Society

The event 'Public Dialogue – Making a difference' will take place on Monday 19 October, 2009 in Westminster, London. Sciencewise-ERC will host the event with The Hansard Society, the UK's leading independent, non-partisan political research and education charity. The event will aim to strengthen and encourage greater public involvement in politics.

Sciencewise-ERC will be taking part with keynote speakers at the evening reception, hosted by Lord Winston. This event will attract a large number of MP's, Lords and key Sciencewise-ERC stakeholders linked with the priority areas within science, technology and innovation.

## The Hansard Society

The Hansard Society is the UK's leading independent, non-partisan political research and education charity. We are delighted to be working with Sciencewise-ERC; sharing our expertise in public engagement to help it promote better public dialogue around science and technology policy. We aim to strengthen parliamentary democracy and encourage greater public involvement in politics. At the heart of our work is the principle that civic society is most effective when its citizens are connected with the institutions and individuals who represent them in the democratic process. We inform decision makers and the public through debate and discussion, training and research, providing accessible resources and analysing the scope of new technology in engaging the public.

Our research and publications look at various aspects of democracy in the UK, including issues such as public participation in politics and the process of law making. Our research often also provides recommendations to Parliament and Government on areas where improvements need to be made; many of which have been implemented. Our most recent publication *The Scottish Parliament 1999-2009: The First Decade* was published to coincide with the 10th anniversary of the Scottish parliament and looks at lessons learned, challenges it faces and achievements thus far. Prior to this was *Law in the Making*, an in depth study that analyses the influences and elements that come together in making

an act of Parliament. Both publications were published in hard copy, available for purchase.

We also publish, on a regular basis, briefing papers that are free for download from our website; they are often relevant to a current issue in Parliament and society. The most recent was *Restoring Trust in the House of Lords*; a briefing paper that looks at standards of conduct within the second chamber following recent events. It sets out a range of measures and recommendations for reinstating public trust in the House of Lords.

The series of research and publications we produce includes the annual *Audit of Political Engagement*. It provides a statistical context to everyday speculation about the state of political engagement. In doing so, the audits indicate the degree to which attitudes and behaviour change year-on-year and provides a fuller picture of public participation and engagement with politics.

Our youth engagement projects allow young people to experience active citizenship and direct engagement with policy makers. The *HeadsUp* online forum allows under-18s to debate political issues with their peers and decision makers. It is a unique forum ensuring young people's views are taken into account by policy makers and politicians. *Y Vote Mock Elections* equips young people with valuable skills that will enable them to participate fully in future elections. It has been running

for 50 years and continues to be very popular. Both projects are excellent tools to help education professionals deliver the citizenship curriculum.

Hansard Society events are a way of providing a neutral platform for debate around politics. We host regular events for our Members, the public and parliamentarians. Our collaboration with Sciencewise-ERC, culminating in an event in October 2008, reflects our view that good public debate around policy issues and law making is more productive if led by informed public representatives. We believe by introducing parliamentarians and policy makers to the work of Sciencewise-ERC, they will have the opportunity to be better informed about how to engage in public dialogue, ensuring public views are taken into account when policy and legislation around the technology is being developed.

For further details about the Hansard Society visit [www.hansardsociety.org.uk](http://www.hansardsociety.org.uk)





# Science for All group

As readers may know, the Department for Business, Innovation and Skills (BIS) has been working on a strategy for Science and Society. The last edition of the Sciencewise-ERC newsletter reported how the strategy is starting to take shape and how the Science for All group, chaired by Sir Roland Jackson of the British Science Association, will be incorporating public dialogue in its activities.

The Science for All group has now met and is developing a shared vision for public engagement and a description of the rationales and purposes underlying this activity. The group has decided to focus their activities on five key areas in addition to this:

- **Science and its inclusion/exclusion in culture**  
– to start to address the aim of delivering a shift in cultural awareness, recognition and support for science
- **Recognition of public engagement activity**  
– with the aim to achieve greater acknowledgement of the importance of public engagement activity in all sectors

- **Training for public engagement** – linked to the recognition of the importance of public engagement activity in all sectors, to support staff to develop their skills and capabilities in conducting effective public engagement
- **Mapping of the public engagement infrastructure**  
– to develop a co-ordinated public engagement framework which is sufficiently flexible to recognise a range of engagement activity, including public dialogue
- **Structures and processes for public participation**  
– to work towards ensuring that public perspectives are sought, recognised and responded to by the scientific and policy communities

Along the way, the Science for All group will be consulting with the community and looking for examples of good practice in all of these areas, so please visit the website to comment on plans and to find out the latest news: <http://interactive.bis.gov.uk/scienceandsociety/site/science-for-all/>

# Stakeholders

## – Why Dialogue Works



**BIS**  
Department for  
Business Innovation  
and Skills

A Sciencewise-ERC event, 'Stakeholders – Why Dialogue Works', will be held on 7 October 2009 in Westminster, London. This event will provide those attending with the opportunity to network and gain a greater understanding of Sciencewise-ERC.

During the course of the day, stakeholders will hear from keynote speakers on topical issues, such as Roland Jackson from the British Science Association, talking about the latest from the 'Science for All Group' and will show the role for public dialogue within the wider context

of public engagement. The day will also provide the perfect backdrop to hear about some of the challenges in public dialogue, as well as obtaining feedback and insights from stakeholders' own work and where they see the future of dialogue heading.

The final discussion will explore how Sciencewise-ERC can spread the word about the key lessons in dialogue, and further embed cutting-edge best practice in public engagement in science and technology policy-making.



To register for this event online, please visit [www.sciencewise-erc.org.uk/WhyDialogueWorks](http://www.sciencewise-erc.org.uk/WhyDialogueWorks) or e-mail [Karen.Smith@aeat.co.uk](mailto:Karen.Smith@aeat.co.uk) for further details.

## Upcoming events



### British Science Festival

Taking place on 5 – 10 September 2009 in Surrey, this year's festival promises the latest in science, technology and engineering. The festival is being hosted by the University of Surrey and events will be taking place across the county. Featured events this year include the science of human attraction, the magic of computer science, why peoples' sleep deteriorates with age and where creativity comes from.

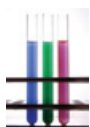
Supported by the British Council, the Festival is working in partnership with the Darwin Now project to mark 200 years since the birth of Charles Darwin and celebrate his legacy by exploring his scientific ideas and the remarkable impacts they made. Within the festival programme there will also be a host of events linked to International Year of Astronomy. For further details and to view the online programme please visit <http://www.britishecienceassociation.org/web/BritishScienceFestival/index.htm>



### Innovate 09

Hosted by the Technology Strategy board, Innovate 09 takes place on 13 October 2009 at the Business Design Centre, London and assesses all aspects of technology innovation. Attendees will be given the opportunity to learn about the latest funding opportunities, tools and networks to commercialise their research and development activities.

There will be particular focus this year on the commercial exploitation of a low carbon economy, sustainable energy generation and supply, the digital economy and healthcare of the future. Business, academic and Government leaders will come together at this event to discuss the opportunities of technology innovation. Further information and registration can be found at [www.innovate09.co.uk](http://www.innovate09.co.uk)



### Manchester Science Festival

The third annual Manchester Science Festival is scheduled for the 24 October – 1 November 2009. A packed programme of events and activities are planned throughout the city, including comedy, debates and cutting edge science. Visitors will be invited to look into space, get spooky for Halloween, discover the future of robotics, and delve into Manchester's scientific history.

During the festival the Manchester Beacon Science Festival Community Awards 2009 will be taking place. The Manchester Beacon for Public Engagement is currently inviting applications for four grants, available to academics, researchers, university students, MOSI staff and community groups to work together to deliver community engagement activities.

For more information on the festival and Beacon Awards visit [www.manchestersciencefestival.com](http://www.manchestersciencefestival.com)

## Sciencewise Expert Resource Centre (ERC)

The Sciencewise-ERC, funded by the Department for Business, Innovation and Skills (BIS) helps policy makers commission and use public dialogue to inform policy decisions in emerging areas of science and technology. It consists of a comprehensive online resource of information, advice and guidance, together with a wide range of support services aimed at policy makers and all the different stakeholders involved in science and technology policy making, including the public. The Sciencewise-ERC also provides co-funding to Government departments and agencies to develop and commission public dialogue activities.

## Contact details

For further information please log on to: [www.sciencewise-erc.org.uk](http://www.sciencewise-erc.org.uk)

Email: [enquiries@sciencewise-erc.org.uk](mailto:enquiries@sciencewise-erc.org.uk)

Helpline 0870 190 6324

Sciencewise  
AEA  
329 Harwell  
Didcot  
Oxon  
OX11 0QJ