



# The Biosciences - Society interface

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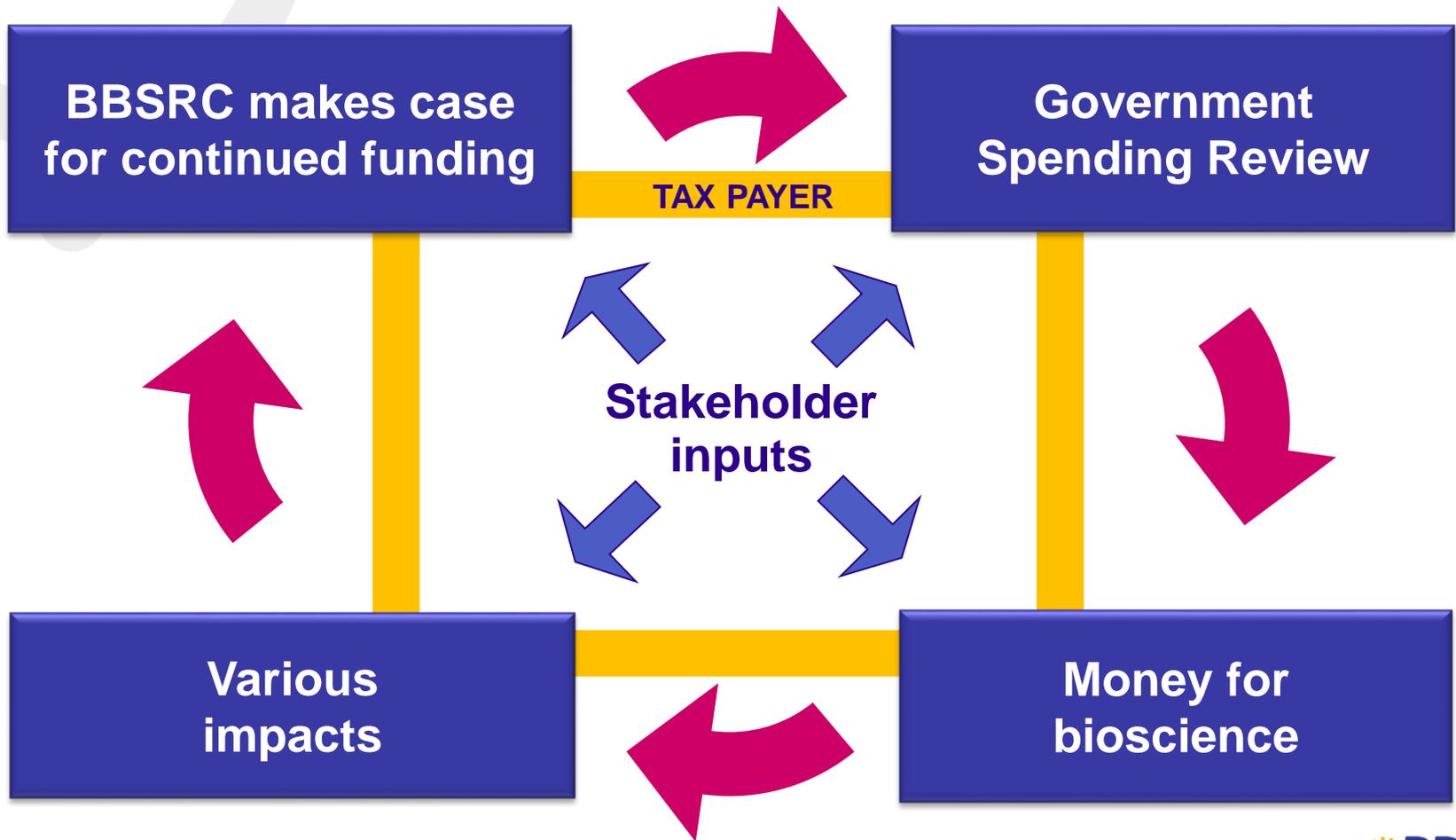
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# How the presentation will unfold:

- Why are public attitudes important?
- How have we attempted to gauge public attitudes?
- What have we learned?
- What should we do next?

# The UK public funding cycle



# Why bother with public attitudes?

## Must do:

- Because funders require it (Mission Statement).
- Ethical imperatives: research impacts on society (stakeholders).

## Smart to do:

- Improve stakeholder understanding about research and its importance.
- Gain skills (eg in public interactions).
- Better, more relevant research through feedback from stakeholders.

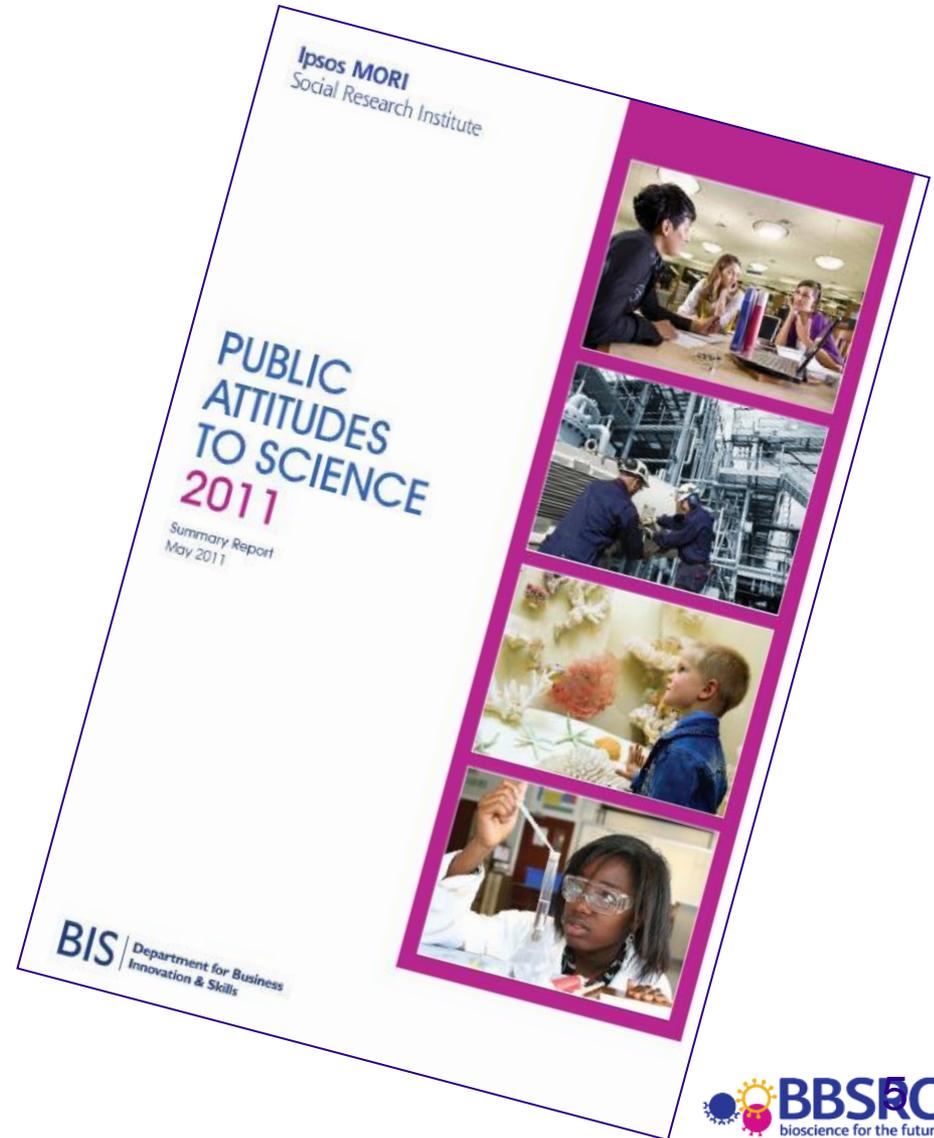
## Wise to do:

- Ensure research is in broad cultural conversation with society (openness of our organisation and trust).
- Inspire future generations to become scientists.

# Public attitudes to science

Four-fifths (80%) agree that, “*on the whole, science will make our lives easier*”

...three-quarters (76%) think scientific research makes a direct contribution to economic growth in the UK, and nine-in-ten (91%) agree that young people’s interest in science is essential for our future prosperity.



# How have we attempted to assess public attitudes?

- Questionnaires.
- Seeking consensus views of the public on a specific subject.
- Extended dialogue with members of the public.

# Gauging public attitudes: Eurobarometer studies

- Seven studies (1991/ 1993/ 1997/ 2000/ 2002/ 2006/ 2010).
- Questionnaire-based study of European citizens.
- Seek to gain insight into attitude through tick-box questions (no discussion)
- Identified “biotechnology” as beneficial to society but also identified risks.
- Eurobarometer 2006 was the first to ask questions on biofuels, bio-plastics and molecular ‘pharming’: **responses overwhelmingly positive!**

# Next steps: Consensus Conference (1994)

- Small number of representatives for UK society recruited, forming a “lay” panel.
- Weekends spent with experts gaining balanced views of pros and cons of **Plant Biotechnology**.
- Conference over several days where representatives seek evidence to key questions they have identified.
- Expert witnesses present opinions.
- Assessment of the evidence by lay panel members.
- Conclusions, recommendations and report: produced by the lay panel members.

# Further levels of sophistication: public dialogues

- Stem cells
- Nanotechnology
- Bioenergy
- Synthetic biology
- Food, nutrition and health
- Working with industry

# Dialogues: a summary

- The RCUK definition of public dialogue is '*deliberative (i.e. over time) participatory engagement where the outcomes are used to inform decision making.*

There are four key elements of public dialogue:

- **Deliberative**: emphasising mutual learning and dialogue;
- **Inclusive**: involving a wide range of citizens and groups whose views would not otherwise have a direct bearing on policy deliberation;
- **Substantive**: focusing on topics relevant to specific decision contexts, and also relating to areas of public knowledge and experience; and
- **Consequential**: commitment from decision makers to consider dialogue in ways that can lead to a material difference to a decision or strategy.

# Bioenergy Public Dialogue 2013

- 11 public dialogue events were run by researchers and other groups in 2013.
- 162 participant feedback forms and 35 organiser feedback forms were received.
- many saw bioenergy as a key part of - but not the entire solution to - our energy needs in the future.



## Feedback to researchers included:

- Ensuring the viability, practicality, scalability, accessibility of bioenergy technology.
- Who is going to benefit and what are their motivations.
- Implications for people and for the planet and what's most sustainable long-term.
- Cost/economics/funding.
- Talking to and informing the public/transparency.
- Listening to the public and taking their opinions into account.



# Public engagement: what did we learn?

- UK public is very excited about science and technology!
- Public likes to be asked/consulted about science issues, preferably early on, before widespread adoption.
- Essential stuff to do: our “licence to operate” and be trusted by stakeholders.
- Difficult to achieve a balance of representatives and consequent views from “society”, whichever way it is done.
- Repetitive themes emerge: governance, who benefits, safety and control/ regulation of the use of the technology.
- Tricky to incorporate public views in the setting of science strategy.

# What's next? What should we try next?

- Rather than consider subjects piecemeal, present as a wider scenario:

*What do we want the World to look like in the future and what is the role of bioscience in that World?*

- More substantial piece of work that probably could not be undertaken by BBSRC alone.
- Will need significant planning and resources to achieve outcomes.

# Questions.....?

