

Nanotechnology, Risk and Sustainability:
Moving Public Engagement Upstream



Nanotechnology, risk and sustainability: moving public engagement upstream is a two-year project, funded by the Economic and Social Research Council, and hosted by the Institute of Environment, Philosophy and Public Policy, Lancaster University and Demos.

THE ISSUES

Nanotechnology promises to be one of the defining technologies of the 21st century. Based on the ability to measure, manipulate and organise material on the nanoscale – 1 to 100 billionths of a metre – it is set to have dramatic and potentially disruptive impacts across the fields of physics, chemistry, biology, materials science and engineering. Yet such aspirations beg a host of questions. At what stages in R&D processes is it realistic to raise issues of sustainability and the public interest, given the generally private and indeterminate nature of such processes? How and on whose terms should such issues be debated? And how adequate are dominant institutional discourses of risk and ethics in addressing such issues? The project asks how, in the light of recent experiences with biotechnology, socially and environmentally-sensitive governance processes might be developed, which can improve the contribution of nanotechnology to sustainable development, by moving the site of public involvement further 'upstream' within R&D processes.

THE RESEARCH

The research is broken in four phases:

- 1. Learning from Past Experience:**
To draw lessons from recent experiences with biotechnology that can be applied to emerging debates about the sustainability of nanotechnology.
- 2. 'Life-world' research:**
Mapping the 'life-world' of the nano-scientist in order to gain a richer understanding of the culture and assumptions of their work and praxis.
- 3. Exploring public responses:**
An interactive series of four focus groups aimed at understanding potential public responses to nanotechnology.
- 4. Expert interaction with the public:**
An interactive 'expert-public workshop' to examine the implications of the research for developing more upstream R&D processes in nanotechnology.

OUTPUTS

The main research findings will be published in a final report – an agenda-setting account of how the sustainability of nanotechnology can be maximised. Other dissemination activities will take place through collaboration with organisations such as Green Alliance and the Royal Society for the Arts, and through targeted meetings with policy-makers in DEFRA, DTI, Cabinet Office and the Environment Agency. A series of academic articles based on the research will also be written for relevant environmental sociology, science studies and technology journals.

If you have any comments on any aspect of the research please contact us at the address below.

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