

# Evidence-based policy-making and the role of knowledge in environmental and resource efficiency policy

Ben Shaw, Head of Environment Group  
Policy Studies Institute, London

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# Aims and coverage

- Reflections on the research-knowledge-evidence-policy interface
- Inform following discussion –
  - What types of evidence should researchers be generating?
  - What do policy-makers want/need?
  - Mechanisms of interaction
- Knowledge and its generation
- Policy-making and political process
- Relationship of research/evidence to policy
- Mechanisms of research utilisation

# Evidence-based policy

- An approach that ‘helps people make well-informed decisions about policies, programmes, and projects by putting the best available evidence at the heart of policy development and implementation’ (Davies, 2004, p3)
- Narrower definition – an approach that promotes a particular methodology for producing a specific form of evidence
  - Systematic reviews and meta-analyses,
  - Particularly with a focus on assessing policy interventions – What Works
  - Guidance on practice, perhaps leading to development of evidence-based programmes of intervention.

# Evidence-based policy

So:

- More and different types of evidence
- More transparent use of evidence
- Consideration of quality and critical use of evidence
- About a process as much as the evidence
  
- ‘...in contrast to opinion based policy, which relies heavily on either the selective use of evidence (e.g. on single studies irrespective of quality) or on the untested views of individuals or groups, often inspired by ideological standpoints, prejudices, or speculative conjecture.’ (Davies 2004)

# Evidence-based policy

But criticisms of evidence-based policy include:

- Inherently conservative and delaying of reform
- Objectivity of answers to political and value-based issues
- Can policy ever be more rational and deliberative?
  
- Highlights challenges of policy-making but seems hard to argue that more evidence is not a good thing...

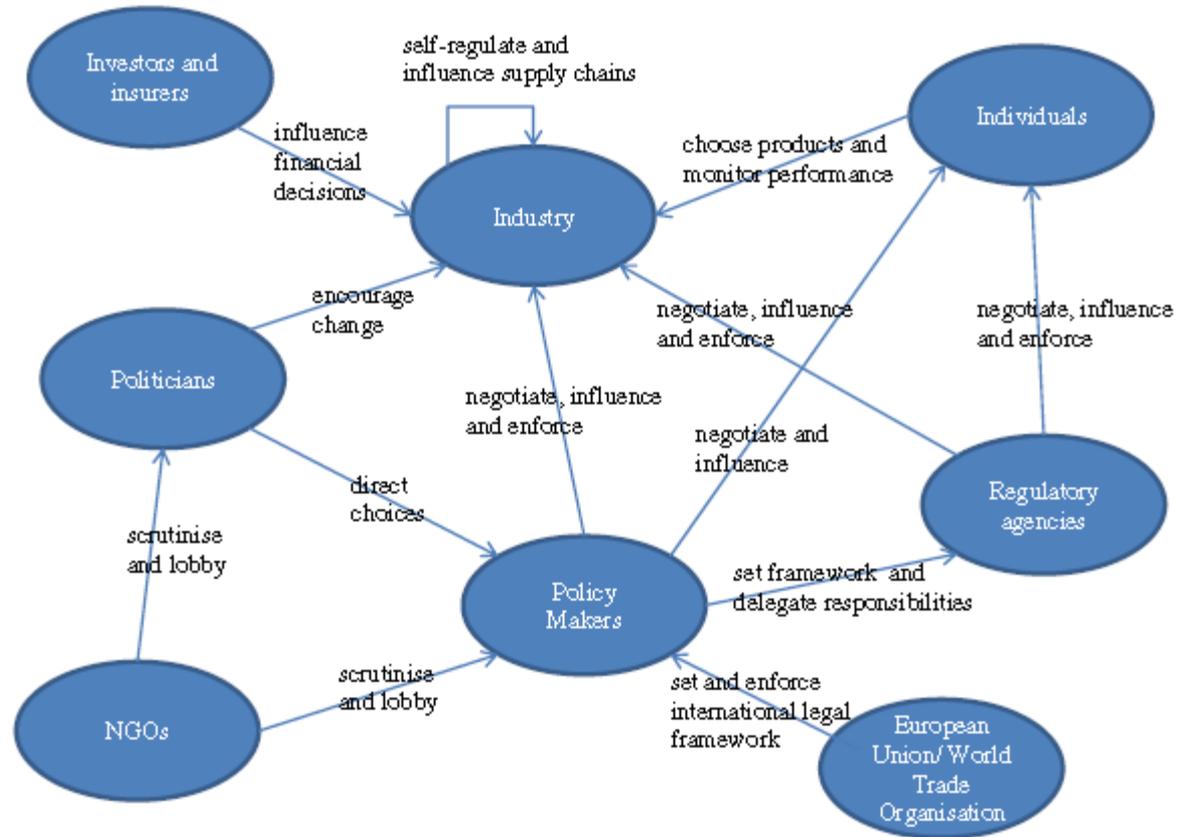
# Changing Environmental Discourses

## Challenges

- (Evidence-based) policy struggling to develop sufficiently strong or fast responses to environmental challenges.
- Contested evidence on nature of environmental problems and solution exacerbated by uncertainty in environmental systems.
- Evidence-based policy obscures or overlooks important political, social and moral judgements.
- Exacerbated by complex institutional and actor relationships of interests and expertise – evidence generation, norms and power.

Partially based on Juntti et al (2009)

# Evidence, norms and power relationships



Taylor et al 2013

# Ways of knowing

1. Empirical knowing – the most explicit form of knowing, which is often based on quantitative or qualitative research study
2. Theoretical knowing – which uses different theoretical frameworks for thinking about a problem, sometimes informed by research, but often derived in intuitive and informal ways
3. Experiential knowing – craft or tacit knowledge built up over a number of years of practice experience

Source: Nutley et al (2007)

- Overlaps between 3 categories
- Focus tends to be on empirical
- How are different types figured into policy and what are benefits/cost/risks?

# Bringing evidence into the policy process

## Factors affecting research use

- Nature of evidence
  - Quality, credibility, utility, timeliness, language, narrative power
  - Are costs, cost effectiveness, side effects, distributional issues and public perceptions addressed?
- Links between researchers and users
  - Restricted access to research, poor dissemination by researchers, poor knowledge management by policy bodies, personal contacts, knowledge exchange activities and networks.
- Context
  - Policy context - Weiss's 4 I's – Interests, ideology, information, institutions (Weiss 1995).
  - Research context and supportive environment for dissemination/engagement of policy-makers.

# Bringing evidence into the policy process

- Need to move on from simplistic concepts of knowledge transfer to more nuanced and sophisticated understandings.
- May change judgment about the utility of research and other potential influences on policy.
- Need to recognise different framings of issues and relevance of different forms of knowledge.
- But need time and opportunities for multiple framings to be explored.
- Knowledge transfer not always through the policy process.
- Most significant changes from research may take a long time.

(Based on Owens et al 2006)

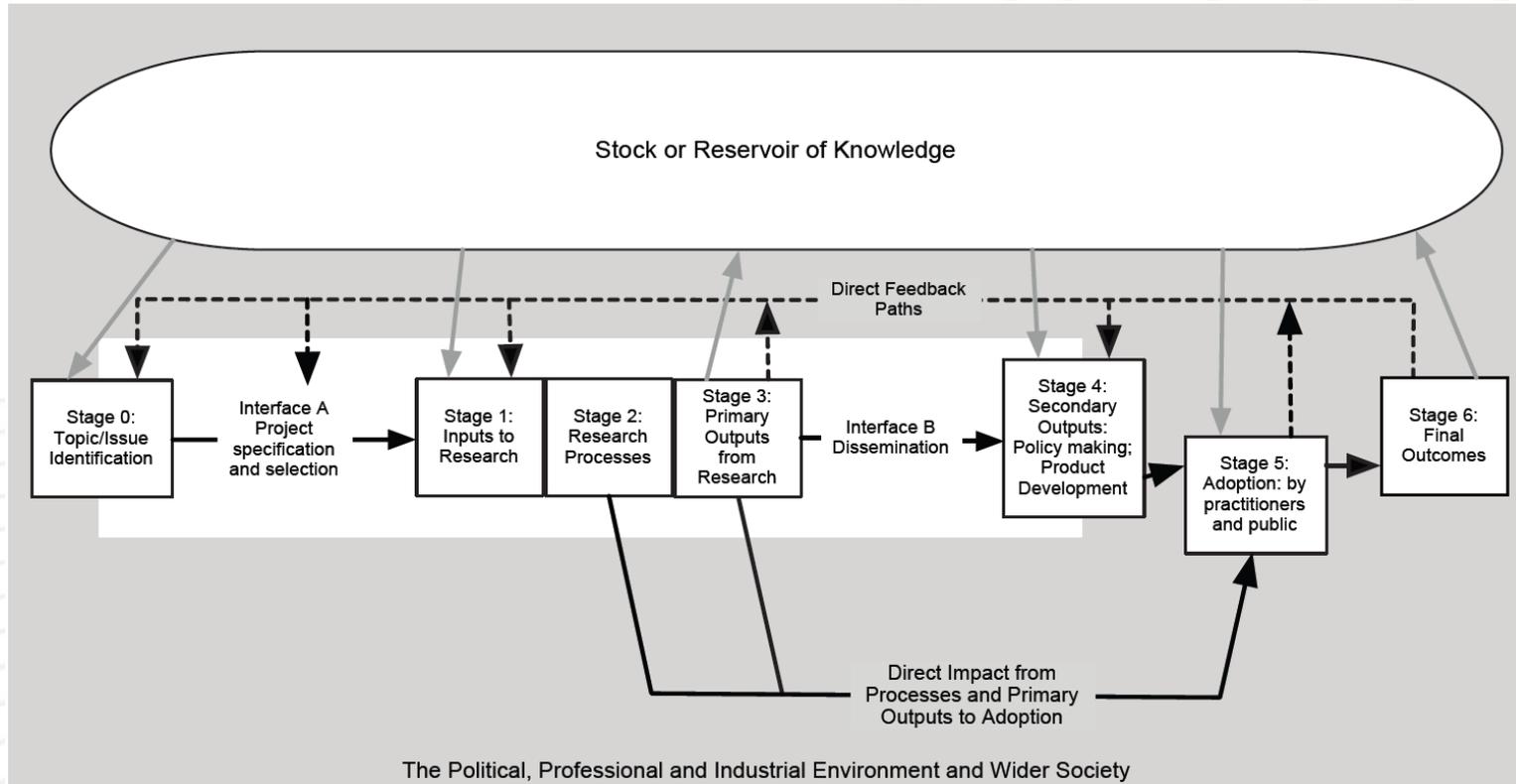
# Types and models of research

1. Instrumental – research directly applicable to specific policy issues
2. Conceptual – changing perceptions, understanding and ways of thinking -
3. Tactical and strategic – to provide support existing policy, to take focus off issue while research is conducted
4. Process – engagement of policy-makers and researchers in to learn during research

Different pathways and mechanisms of use, e.g.

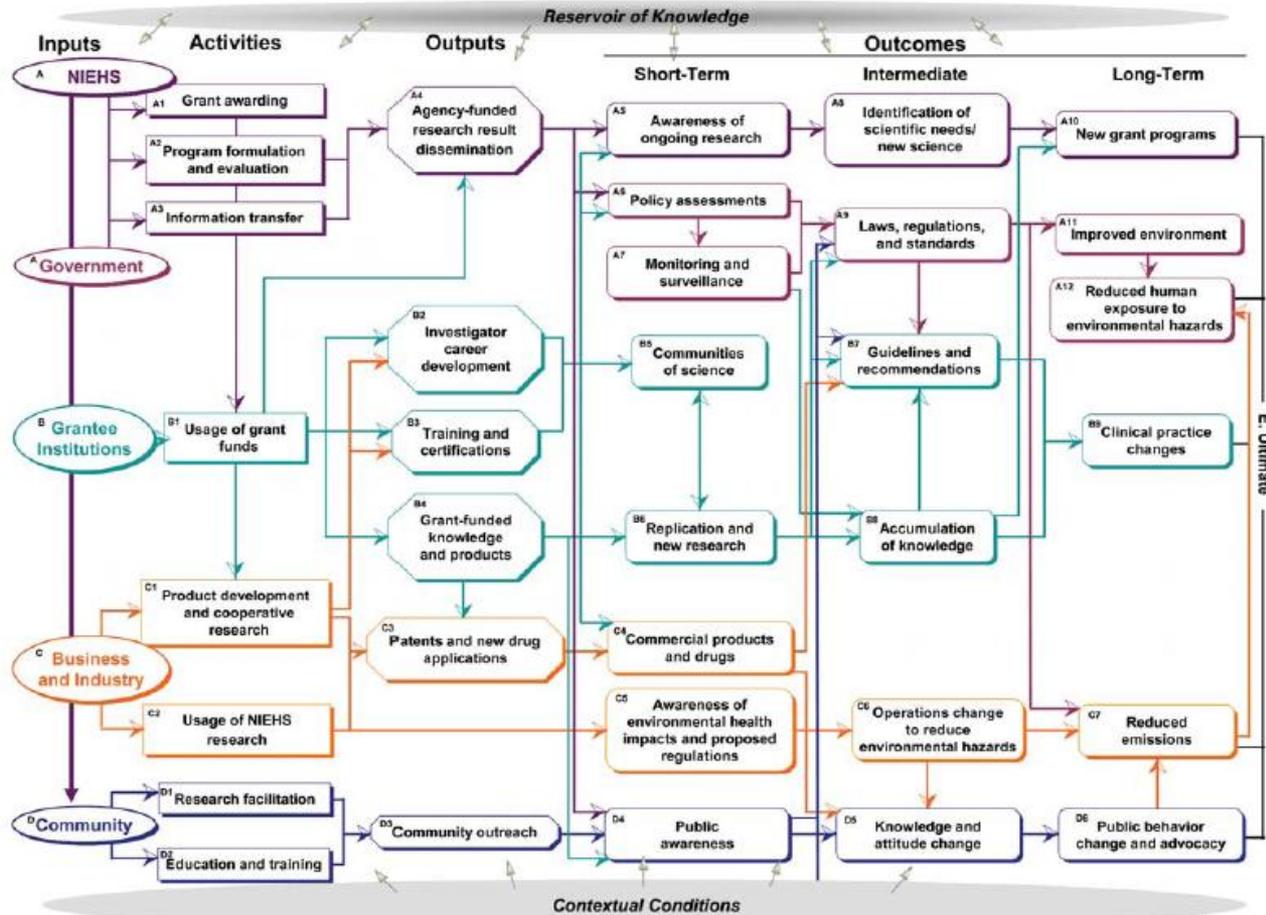
- Instrumental more directly used and faster,
- Conceptual more indirect, slower and not necessarily explicit – knowledge ‘percolation’.
- Who needs what?

# Conceptual model for research 'payback'



**Model for Organising the Assessment of the Outcomes of Health Research.**  
Source: Figure 1, Hanney et al (2004)

# Logic Model - complexity



Example of research programme logic model.  
Source: Engel-Cox et al (2008)

# The policy process

- Agenda setting
- Policy-making
- Policy coordination
- Policy implementation
- Policy evaluation

Headings from Jordan and Adelle (eds. 2013)

- Policy cycle not a useful concept,
- Resource efficiency at different stages for different issues and actors
- What does this imply for evidence needs?

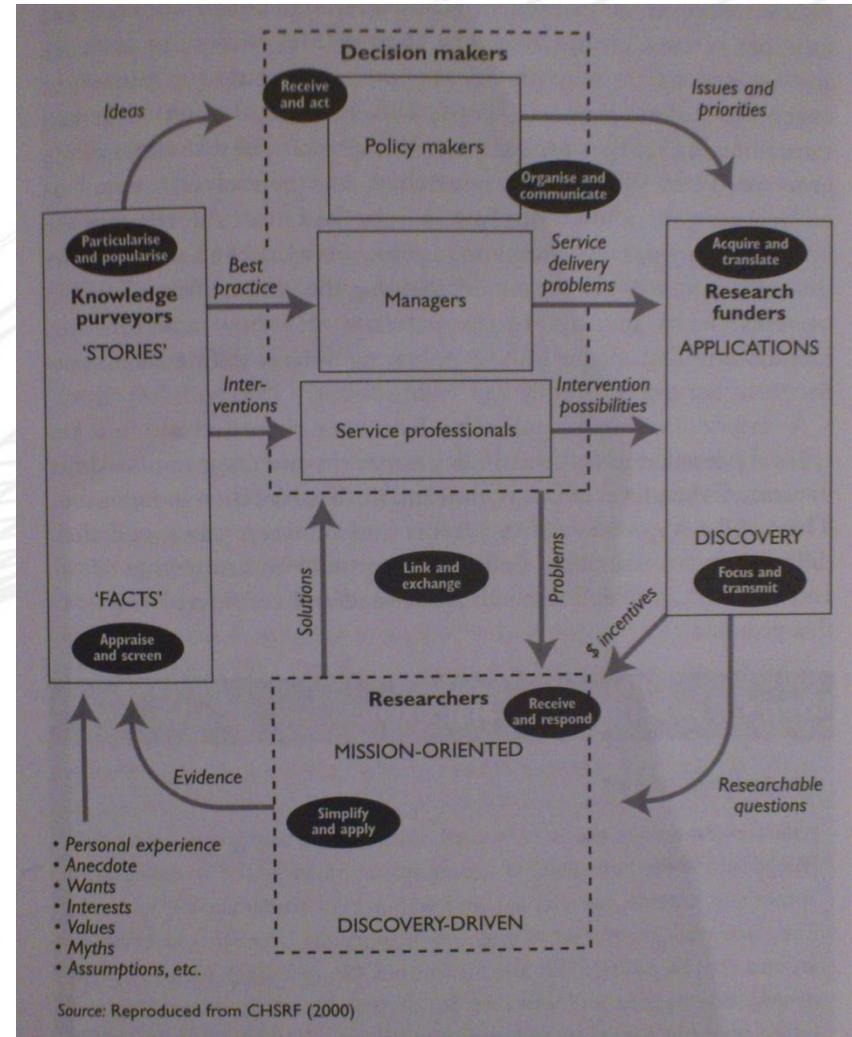
# Changing Environmental Discourses

Some suggestions:

- More transparent division of expert and lay knowledge.
- Science as social negotiation between specialists and stakeholders – participation and consultation not just communication.
- May allow different knowledge to be generated and new options.
- Aim to treat all knowledge with caution and understand its genesis
- Better more explicit understanding of power/interest relationships in policy – to reveal use of evidence.
- Overt juxtaposition of competing and disparate discourses.

Based on Juntti et al (2009)

# Where to focus evidence / Knowledge Exchange improvements?



# Questions for discussion

- Is progress being made and outlined in strategies real and part of iterative exploration of evidence, issues and policy options?
- If yes what needs to happen?
- If no what needs to happen?
  - To evidence generation and use
  - To policy-making
- To what degree is resource efficiency agenda as a priority for action really shared
  - across policy-making functions at variety of levels of government?
  - and broader economic and social actors?
- What evidence would progress this?

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# Contact and further information

Ben Shaw

Policy Studies Institute, London

[b.shaw@psi.org.uk](mailto:b.shaw@psi.org.uk)

[www.psi.org.uk](http://www.psi.org.uk)