



Policy Studies Institute

**Assessing the impact of research on policy:
A review of the literature for a project on bridging research and policy through
outcome evaluation**

Report Summary, February 2008

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This literature review was conducted as part of the Defra Research Contract WR0808 ‘Bridging Research and Policy Through Outcome Evaluation.’ The contract was awarded to a team formed by Technopolis, GHK, King’s College London and Policy Studies Institute.

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King’s College London

King’s College London is one of the top 25 universities in the world (Times Higher 2007) and the fourth oldest in England. A research-led university based in the heart of London, King’s has 19,700 students from more than 140 countries, and 5,400 employees. King’s has an outstanding reputation for providing world-class teaching and cutting-edge research. The College is in the top group of UK universities for research earnings and has an annual income of approximately £400 million. An investment of £500 million has been made in the redevelopment of its estate. King’s has a particularly distinguished reputation in the humanities, law, engineering, and social, health and natural sciences.

Policy Studies Institute

The Policy Studies Institute (PSI) is one of the UK’s leading independent research institutes, highly regarded for rigorous and impartial evaluation of policy in the UK and Europe. PSI’s Environment Group seeks to undertake interdisciplinary, policy-relevant research of the highest quality, which recognises the interaction at every level between the environment, the economy and society generally. Environmental research at PSI employs a wide range of research methods, from formal modelling and scenario building to various styles of policy analysis and evaluation.

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Research Summary

How do you (best) evaluate the impact of research programmes on policy?

This research summary is for Defra officials interested in evaluating the impact of research on policy. There is a growing interest in such evaluation within the research councils, international organisations, the European Union and academia, and a literature review was therefore commissioned by Defra to inform thinking in this field. It draws on 156 UK and international papers and reports: 58 (37%) sources report on evaluations of the impact of research on policy, while others are more reflective and descriptive about the evaluative process and the range of methods available.

Examples from other European Environment Ministries

The Finnish Environment Ministry scores all the research projects it funds against a set of evaluation criteria. They are scored by both the project leader and the Ministry supervisor. Any differences arising are explored through interviews with project leaders.

The Netherlands Environment Ministry conducted two surveys (using external evaluators) of all policy makers who had commissioned research in a particular year. The compulsory questionnaire asked how, and the extent to which, the research had been used, and was followed up with interviews.

This is a field of practice currently experiencing rapid development and examples of recent innovative practice are captured in the review. The identified evaluations are consistent in their use of a mixture of approaches, often involving a combination of different qualitative methods, including case studies, in-depth interviews and documentary analysis. These are sometimes used in conjunction with more quantitative methods such as surveys.

Methods and approaches used to evaluate the impact of research on policy

- Qualitative methods: semi-structured interviews, documentary analysis, field visits and observations
- Quantitative methods: surveys, bibliometrics and patent/new technology tracking
- Panels and peer review
- Workshops and focus groups
- Process tracking: historical tracing, positive utilisation narratives, tracing post-research activity and impact logs
- Literature review
- Network mapping and analysis

Practice varies considerably between different countries and policy contexts. For example, in the field of international development, there is an emphasis on qualitative, participatory evaluations focussing on learning and service improvement. The main method used for evaluating the impact of European Union (EU) research programmes is panel reviews. There have been a

number of recent reviews exploring alternative methods for evaluating EU investments such as bibliometrics, econometrics and social analysis. However, there is continued emphasis on the value of panels; these other methods are generally viewed as useful complements rather than replacements. Although panel reviews attract criticism for their reliance on experts, they do create a sense of ownership through enabling the participation of key individuals from different countries. This is particularly important in the European context and underlines the importance of selecting methods that are both fit for purpose and appropriate to the needs of key stakeholders.

While many evaluations track forward from a research project or programme to look at its impacts on policy, others track back from policy to identify research use in the policy development process. Approximately half of the evaluations in the review are explicitly informed by a conceptual framework or model of the research-policy process. While there is much in the literature about the advantages and disadvantages of different approaches, there is very little about their effectiveness (in terms of capturing impact) or costs.

Examples of existing frameworks

HERG – The Health Economics Research Group Payback model is the best known framework for evaluating research impact (on a range of areas including policy). It has been used by a range of organisations including the UK Economic and Social Research Council and the NHS. However, it is a comprehensive (and therefore potentially costly) framework that may not be applicable in all settings.

RIF – The Research Impact Framework assesses policy impact around five dimensions: the level of policy making, the type of policy, the nature of policy impact, policy networks and political capital. This framework generates brief one page impact narratives that could be more attractive and applicable than HERG in applied research environments.

The toolbox of methods used in evaluating the impact of research on policy seems to be relatively transferable to different policy domains. However, it is suggested that environmental policy typically involves a wide range of stakeholders and that the views of stakeholders need to be heard in the evaluation process. Questions regarding the allocation of responsibility for conducting the evaluations should be addressed. Some papers highlight the benefits of using a blend of internal and external evaluation.

Eight key dimensions of best practice emerge from the literature analysis undertaken for this study. These are phrased as key questions to be addressed in order to identify the most effective approach to evaluating the impact of research on policy. The literature stresses the benefits of addressing these questions early in the research and development process. For example, good quality systems need to be in place in order to capture and track the use of research. Practical constraints relating to time, budget and skills will inevitably guide any evaluation of research and development impacts on policy. Responses to the eight dimensions below can be used as a basis for developing an evaluation framework that is tailored to fit the particular organisational context, resources and requirements.

8 key questions when designing a research impact evaluation

1. What is your conceptual framework?
2. What are the outcomes of interest?
3. What methods will best explore the outcomes of interest?
4. How do you address attribution?
5. What is the direction of travel for the evaluation?
6. Is this a mixed method approach, providing scope for triangulation?
7. Will the methods selected capture context and the complexity?
8. When might be the best time to conduct the evaluation?

These need to be considered in the light of the time, skills and resources available for the evaluation.

The literature suggests that more effective evaluation in this field could be achieved. For example, reports argue for the development and application of existing conceptual frameworks (including, for example, HERG) and innovative methods for evaluation (advanced bibliometrics, survey methods and network mapping). The development of new conceptual frameworks and methods is also advocated. Future evaluations might focus on assessing the impact of interventions designed to promote research use, including knowledge brokers, networks, and broader linkage and exchange programmes. We are still a long way from providing a convincing answer to the question: does our investment in research and development make a difference?

About the review

The Centre for Evidence & Policy at King's College London, and the Environment Group at Policy Studies Institute conducted a literature review to explore methods for evaluating the impact of research on policy outcomes that might be appropriate to the Sustainable Waste and Resource Management and the Sustainable Consumption and Production research programmes. The review is part of a larger study conducted in partnership with Technopolis and GHK Consulting, and focused on English language publications over the period 1987 to 2007. The search strategy included four elements: database searches, web searches, citation tracking and expert contacts. The sources comprised ten key databases, three library catalogues and thirty relevant organisations. Citation tracking involved following up references and contacts emerging from documents identified through the initial stages of the search, and proved to be a particularly fruitful source of relevant material. The final part of the search aimed to ensure the review captured the most up-to-date knowledge on impact assessment. This was achieved through holding discussions with the broader study team responsible for the evaluation, and through asking expert contacts for feedback on the draft report and for their advice regarding the inclusion of information from any unpublished papers or work in progress. A total of 351 papers were identified through the search, of which 156 met the selection criteria for inclusion in the review.

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