Abstract Integrating evidence, politics and society: a methodology for the science–policy interface*

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There is currently intense debate over expertise, evidence and 'post-truth' politics, and how this is influencing policy formulation and implementation. In this article, we put forward a methodology for evidence-based policy making intended as a way of helping navigate this web of complexity. Starting from the premise of why it is so crucial that policies to meet major global challenges use scientific evidence, we discuss the socio-political difficulties and complexities that hinder this process. We discuss the necessity of embracing a broader view of what constitutes evidence—science and the evaluation of scientific evidence cannot be divorced from the political, cultural and social debate that inevitably and justifiably surrounds these major issues. As a pre-requisite for effective policy making, we propose a methodology that fully integrates scientific investigation with political debate and social discourse. We describe a rigorous process of mapping, analysis, visualisation and sharing of evidence, constructed from integrating science and social science data. This would then be followed by transparent evidence evaluation, combining independent assessment to test the validity and completeness of the evidence with deliberation to discover how the evidence is perceived, misunderstood or ignored. We outline the opportunities and the problems derived from the use of digital communications, including social media, in this methodology, and emphasise the power of creative and innovative evidence visualisation and sharing in shaping policy.

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