

# Evaluation of the ESRC Electricity Policy Research Group

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## Executive summary

The Electricity Policy Research Group is one of three Research Groups commissioned as part of Towards a Sustainable Energy Economy Programme (TSEC). It falls into “Managing new Uncertainties the Socio-Economic Challenges and Implications of Moving Towards a Sustainable Energy Economy” theme. The award of £2,382,683 was made to the University of Cambridge to cover five year period starting 01 October 2005 and ending 31 September 2010. Since its inception, the Group was led by Professor David Newbery (Director) assisted by Professor William Nuttall and Professor Michael Pollitt as Co-Investigators. Professor Pollitt also served as Acting Executive Director in 2005-06. The EPRG Advisory Board was chaired by Professor Stephen Littlechild and its membership was drawn from academia, industry and government bodies.

This evaluation was carried out by the Energy Policy Group based at the University of Exeter and was led by Professor Catherine Mitchell. The Evaluation Team reviewed all the written materials provided to them, including the five nominated outputs and the Final Report. In addition to this, the Evaluation Team made use of critical reviews provided by selected referees drawn from academia, industry and policy makers; conducted interviews with EPRG members; and undertook telephone and/or email correspondence with the Chairman of the Advisory Board and 12 British research users. In line with the brief, this report assesses *“the academic and scientific achievements and impact of the research and the effectiveness of the Research Group as a means of organising and enhancing the work”*.

The referees generally thought very highly of the Group’s academic contribution while offering some critical comments and reservations. The overall view was that the EPRG should be commended for both quality and quantity of their outputs. Under the TSEC award, the Group has published 127 peer-reviewed papers through its Working Paper series, a large number of which have already been published in journals, with more to be published in the future. The significance of the Group’s working paper series is evidenced by the high number of papers that were developed into journal articles, and by the interest in users in joining the Energy Policy Forum or attending their events. The series itself has become an established reference point for researchers and practitioners in the field. The ease with which research outputs can be accessed via the admirable EPRG website has also aided dissemination. Overall, there is near unanimous praise for the EPRG’s academic excellence. The overall view of the majority of the referees’ reviews are reflected in the following: *“all told, I have always thought EPRG something of a model in terms of producing academically rigorous work which has implications in the world at large - and that probably owed a lot to both the leadership of the group and its ability to assemble a critical mass of able and committed people”*.

The international relationships that the EPRG have developed, and maintained, are a particular strength. The origins of the Group lie in the collaboration between Cambridge University and MIT in the early 2000s and this international focus has developed with links to other academic centres in Europe and elsewhere such as the Florence School of Regulation, Research institute

of Industrial Economics Stockholm, University of Paris, Climate Policy Impact Berlin and numerous others.

The Group has engaged with research users through various mechanisms, with the highlights being the website and the very successful and well received Energy Policy Forum (EPF) designed to facilitate knowledge exchange between corporate members and the EPRG researchers. The EPRG also engaged with other research groups, both within the UK and elsewhere, and in particular with practitioners, regulators and, to some extent, policy makers. Members of the EPF have underlined the benefits of having access to objective research through the EPF and that the Group has established itself as a helpful point of contact on energy market economics and related issues. The dissemination of their work has also been thorough and successful, primarily with the user community.

Collaboration was assessed with academics, and secondly, with non-academic users. With respect to the first group, the UK has several academic energy groups, several ESRC funded research groups and the UK Energy Research Centre (UKERC), also funded by TSEC. If collaboration is taken to mean working with other groups or institutions, then there is limited evidence of it, particularly with those which do not share the same economic paradigm. Overall though the perception of the EPRG within the British energy groups - whatever their focus - is one of a comfortable fit: that the EPRG has a particular place and they fulfil that. The picture is somewhat different for non-academic users. There are arguably two key means that the Group collaborates with non-academic users: the EPF and through their 35-40 Associates. In this form, there is no doubt that collaboration occurs and is beneficial to all parties, whether it be Group researchers, the Associates themselves, the users of the EPRG website or the attendees of the EPF meetings. However, it appears that non-academic collaboration is also selective in that collaboration with the environmental user side of the energy industry appearing minimal.

UK energy policy and regulation has undergone a number of significant developments during recent years. The creation of a single GB electricity market with the introduction of BETTA, the Electricity Market Reform process, revised transmission access arrangements, Project Discovery and developments in both transmission and distribution network regulation have occurred during the period of the ESRC's award. There has therefore been ample opportunity for the EPRG to input to these and other policy initiatives and to generally influence the direction of future energy policy and network regulation development. It is clear that, particularly in terms of the development of network regulation, the Group has been influential. The impact of contributions made by the Group can be seen in the design of distribution network regulation, in particular the areas of performance and innovation incentivisation.

In the areas of UK Energy Policy development and electricity market reform, the Group has arguably been less influential. One of the referees thought that *"more could be done pro-actively to engage with policy makers (...) and try to understand their perspective"*. Later he added: *"policy development is more often than not a compromise between competing interests in society and, sometimes, the outcome of the exercise may seem inconsistent with the 'theory'".*

*However, it is critical that in reaching that compromise that the final policy design delivers on its intended objectives"*. Despite the many workshops and seminars organised by the EPRG specifically with the intention of informing the energy policy debate; the publication of many relevant published papers; and a meeting with DECC officials in Cambridge, the relationship with policy makers does not seem to have been as productive as it could have been.

The EPRG has a powerful reputation, particularly within the more focused energy economics field. The quality of this work is undisputed. However, there is also a view that this research takes place broadly within the mainstream economic paradigm, and has only to a limited extent showed innovation. One of the clear themes raised by the majority of the reviewers is the narrow focus of the Group. Another area of referee concern is the Group's lack of interdisciplinarity of its research, and this despite the Group's third strand of work being related to political science and technology policy. One aspect of this is the relative (im)balance between the three strands of the Group. The first stream of 'Delivering secure reliable and diverse energy in a liberalised market' has been dominant in terms of outputs. An interdisciplinary gap is the paucity of publications undertaken together by different strands. Had the energy economics strand been linked more strongly with the technology and innovation strand, the charge from referees might be given less weight.

The Evaluation Team conclude that there is no doubt that there has been an 'amplifier' effect as a result of the research programme. It expanded money for RAs and PhDs, which are the next generation of skills; this fed into additional papers and ideas; this consolidated the EPRG reputation both domestically and internationally; it created a link between the Economics department in Cambridge with the Judge Institute; it brought inter-disciplinary researchers together, watering down the dominance of energy economics within the group; this strengthened the Energy Policy Forum, its membership and the Associate members of the EPRG, who in turn produced more papers, thereby creating a virtuous circle. Even though there have been issues with finding sufficient funding to sustain TSEC researchers, the Group's reputation has been consolidated domestically and internationally as a result of the award.

The Chairman of the Advisory Board was also impressed with the overall value of the Group. He felt that the EPRG TSEC award has enabled the building up of a significant group of energy researchers who produced an excellent body of work and always had knowledge and understanding of the latest ideas and thinking in terms of both economics and policy . As a result, the EPF meetings were used as a conduit by energy stakeholders as a means to establish what that latest academic and policymaker thinking was.

The referees clearly see the EPRG as a primarily energy economics group functioning within the conventional economic paradigm. Many of the reviewers cited this narrow focus and a lack of real engagement with other disciplines as an explanation of why EPRG were not sufficiently connected to policy making. However, it is also clear that the EPRG holds a very important place in Britain. The Group is visible, influential and highly respected with respect to conventional industry users. They are a marker for economic rigour within markets and network