

Introduction

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Colin Robinson is an inspiration to energy economists the world over. His contribution to the study and understanding of energy markets and policy is outstanding. Colin worked as a business economist for eleven years, initially for Procter & Gamble and then as Head of the Economics Division of Corporate Planning for the Esso Petroleum Company. This was followed by his appointment as Professor of Economics at the University of Surrey in 1968. At Surrey he developed and led the Department of Economics for many years and in particular cultivated the study of energy economics, with the Surrey Energy Economics Centre (SEEC) being established in the early 1980s. SEEC became the focus of research into energy economics and policy with a specialized MSc in energy economics that still runs today, with many past students and scholars benefiting from Colin's teaching, supervision and general inspiration. Since formally retiring from his Chair in the late 1990s, Colin has remained as active as ever. He is Emeritus Professor at the University of Surrey and continues to contribute to the teaching of energy economics and the research of SEEC. In addition he is editorial director of the Institute of Economics in London.

Colin continues to write on energy economics and is sole or joint author of many exceptional publications, including over 20 books and monographs and over 150 learned articles. This is a remarkable achievement. However, it is even more remarkable than the quantity of his excellent writings for two main reasons. The first is that his publications have spanned the complete spectrum of energy economics. He has written on energy modelling and forecasting; North Sea oil and gas; the British coal industry; nuclear power; gas; electricity; utility privatization; utility regulation; the international oil, coal and gas markets; and a number of papers on business and managerial economics. His ability to write and talk with authority across all of these, often wide and varied, areas is renowned.

The second reason is that Colin has the gift to be able to influence not only the thinking of academic energy economists, but policy makers alike. He is a past member of the Monopolies and Mergers Commission (Electricity Panel); he has appeared as an expert witness in public inquiries and arbitration proceedings in Britain, abroad and in cases in the US and

Australian courts; he has given evidence on many occasions to committees of the Houses of Parliament; and is a frequent broadcaster on television and radio. His influence permeates throughout energy policy the world over.

Not surprisingly, Colin's contribution has been honoured by significant energy economics organizations. In 1992, he was named as Energy Economist of the Year by the British Institute of Energy Economics (BIEE) and in 1998 he received the Outstanding Contribution to the Profession award from the International Association for Energy Economics (IAEE).

Energy in a Competitive Market reflects Colin's belief that markets are key to an efficient allocation of resources, applying equally to energy as with any other commodity. He has put forward his belief over a considerable number of years that, wherever possible, competitive energy markets should be encouraged and developed – even before it became fashionable with academics and policy makers. This is wonderfully summarized in the published version of Colin's address at the 1998 IAEE conference when receiving his Outstanding Contribution to the Profession award (Robinson, 2000). In particular, he recalls giving a paper at the 1969 annual conference of the UK Association of University Teachers of Economics where he suggested that a market regime for energy might be an improvement on the nationalized structures in place at that time. These suggestions were seen as 'extreme, if not mildly eccentric' and 'a number of colleagues chided [him for his] paper along the lines that no sensible person could seriously believe that competitive energy markets are feasible – and anyway, even if feasible, they would not be desirable' (pp. 3–4). How wrong these 'colleagues' were. It is a testimony to Colin that he resisted the temptation to 'run with the pack' and continued to pursue the ideas that have now become the 'conventional wisdom'; ideas that in various forms now underpin energy policy across the globe.

The contributions in this book also reflect Colin's involvement with the whole spectrum of energy economics as outlined earlier. Marshall (Chapter 1) reviews the development of competition and regulation in the British gas and electricity industries. She concludes that the natural monopoly elements of gas transportation and electricity transmission and distribution are likely to require regulation in the near future. However, the unbundling that has taken place in these industries means that many services within these industries are now working within ever-increasing competitive markets. Marshall argues that it is effective competition that will eventually achieve the separation of policy, regulation and the commercial management of utility businesses, so that gas and electricity supply can be treated like any other product or service.

Waddams Price (Chapter 2) surveys various attempts of regulators to use comparative efficiency analysis in energy and water utilities. She concludes that there is little direct use of comparative performance (or yardstick competition) in regulation despite its potential and argues that these techniques are a useful addition to the regulatory process. Weyman-Jones (Chapter 3) also surveys developments in benchmarking and yardstick competition in electricity distribution; in particular the theory of yardstick competition and the implementation using data envelopment analysis (DEA). He concludes that the process has attractive incentive properties, but is sensitive to the choice of variables, measurement techniques and size of sample.

The implementation of yardstick competition within the Swiss electricity market is considered by Filippini and Wild (Chapter 4). Using results from an estimated cost function, they present an empirical application of the yardstick competition concept to the Swiss electricity distribution sector and conclude that the concept could be a powerful tool in the implementation of the proposed Swiss electricity market law. Hawdon (Chapter 5) further considers the measurement of efficiency and performance using gas industry data from over 30 countries. DEA is employed and, although there is some ambiguity with some results (such as the lack of clearly defined economies of scale), he shows that the reforms introduced in Britain and planned across the European Union are associated with high levels of technical efficiency.

The effects of competitive markets on the UK coal industry are examined by Parker (Chapter 6), who concludes that with coal it is not possible to separate the influence of politics and economics from the impact of market liberalization and privatization. However, the political agenda and market forces both contributed to the significant contraction of the industry. Stevens (Chapter 7) considers the way economists can help understand the working of the international oil industry, in particular the issue of vertical integration. Kemp and Stephen (Chapter 8) consider the economics of cluster developments in the UK continental shelf (UKCS). They conclude that cluster developments can contribute to developing the UKCS with the substantial benefits available from infrastructure cost sharing and project risk sharing.

The measurement of the underlying energy demand trend (UEDT) when estimating energy demand functions is investigated by Hunt, Judge and Ninomiya (Chapter 9). Using data from the UK, they argue that a flexible approach is required to allow for a potentially non-linear UEDT to avoid biases in the estimated income and price elasticities. Pearson and Fouquet (Chapter 10) conduct a long-run analysis of the relationship between economic development and energy-related environmental quality (carbon dioxide emissions) for a group of post-industrialized countries and a group

of developing countries. They find many common elements in the relationship between emissions, income and time but also some variations in the pathways. They conclude that a country's trajectory can be influenced by a range of exogenous and endogenous factors and these factors change over time and may respond to policy intervention. Finally, Rosewell and Smith (Chapter 11) model incentive mechanisms required to reduce UK emissions, concluding that a 'performance credit' is the recommended instrument.

REFERENCE

Robinson, C. (2000), 'Energy economists and economic liberalism', *Energy Journal*, **21** (2), 1–22.