

# ***The smart grid and residential electricity use:***

***What we know, what we don't, and the case for collaborating with academic researchers.***

*Prof. David Rapson, University of California, Davis.*

***Thursday 8th December, 12.30-2.00pm***

*Old Government House, Women's Federation Room, Cnr Waterloo Quadrant & Princes Street Auckland*

## **Abstract**

When it comes to electricity use, people don't respond to price as much as many might expect. At the same time, behavioral nudges and technological defaults have been shown to produce meaningful demand responses. New technologies that comprise the so-called "Smart Grid" offer several opportunities to leverage these insights into behavioral change. However, translating these insights into policy is fraught with potential pitfalls. In this talk I will discuss how to make the most out of these new technologies (or, more precisely, how to figure out how to make the most of them). I will show why randomized field experiments are invaluable in this setting, and explain why regulators and public utilities stand to benefit immensely from collaborating with academics on research design.

## **Biography**

David Rapson joined the Economics Department at UC Davis in 2008. Professor Rapson specializes in the fields of industrial organization, energy and the environment, with a focus on how to achieve economic efficiency in energy markets. His research includes several collaborative studies with regulated utilities. These include the evaluation of dynamic pricing regimes, carbon offset programs, and the design and analysis of a large-scale randomized field experiment to test the effectiveness of Home Area Network technology (the customer-facing side of the "Smart Grid"). Professor Rapson received his A.B. from Dartmouth College in 1999, an M.A. in economics from Queen's University, and a Ph.D. in economics from Boston University in 2008.