



RCUK End-User Energy Demand Reduction Centre Success

Dr Greg Marsden has led a team of Leeds based researchers as a major part of one of the forthcoming RCUK End-User Energy Demand Centres. The Centre is a £5m initiative run by Professor Elizabeth Shove out of the University of Lancaster. The Centre is steered by Shove, Professor Gordon Walker (Lancaster), Dr Greg Marsden (ITS, Leeds) and Sylvie Dozou (EDF-R&D ECLEER (European Centre and Labs for Energy Efficiency Research)). The Centre has attracted £1.64m of industrial funding from EDF, Transport for London and Tesco's Sustainable Consumption Institute (SCI/TESCO). In addition to Greg Marsden, Tony Whiteing is a named Col at Leeds with involvement from Zia Wadud and Caroline Mullen.

DEMAND: The Dynamics of Energy, Mobility and Demand

The DEMAND Centre's ambition is to provide evidence and ideas capable of informing decisions and inspiring interventions of the kind required to reach the UK's 2050 greenhouse gas emissions target. The Centre has a strong social-science to science focus and is established to tackle problems that span the conventionally separate sectors of mobility and building-related energy demand and focus on end uses that together are responsible for 56% of UK carbon emissions.

While greater efficiency is important, the trend is often towards more resource intensive standards of comfort, convenience and speed. The problem is that we lack a sophisticated understanding of how these trends take hold and of the underlying dynamics of demand itself. The DEMAND Centre takes this problem as its central challenge, contributing directly to the objectives of the call by focusing on what energy is for.

The research approach suggests that energy demand is about more than the public acceptance of new technology, and more than the supply-oriented steering of transition pathways, as described by sociotechnical models of innovation. If we are to understand the fundamental dynamics of demand and engage with related issues of justice, need and entitlement we have to develop a more thoroughly integrated account of the relation between technological provision and social practice, and of the spatial and temporal ordering of end uses. For example, knowing how end use practices vary, when and where they occur, and how and why they change over time is crucial if carbon reduction policies involving real time management or the decentralisation of supply are to have any chance of success. In taking this approach we move into new territory, redefining the problem of energy demand and the range of possible solutions. The DEMAND Centre's programme therefore represents a step change in how problems of end use and energy demand are conceptualised and tackled.

By concentrating on end use practices rather than on pre-defined sectors or resources our research is designed to generate knowledge and inform strategies capable of having lasting impact on the UK's energy demand, and on how this demand is managed in different settings. We develop this innovative theoretical approach through a programme of empirical research, addressing end uses that are of national significance for carbon emissions, including business travel, domestic IT, energy use in commercial buildings, and energy demand associated with an ageing population. The result is a research programme that confronts problems that are central to building a lower carbon future