

INTRODUCTION

Energy demand reductions are crucial if the UK is to meet its 2020 and 2050 greenhouse gas emissions targets. Yet the dynamics of energy demand, and how demand is and might be managed, are still little understood. UK policy interventions to address energy demand and its environmental implications are characterised by unintended consequences, unpredictable outcomes, and, frequently, a lack of desired effects – often blamed on ‘silo thinking’ or a lack of integration in policy-making.



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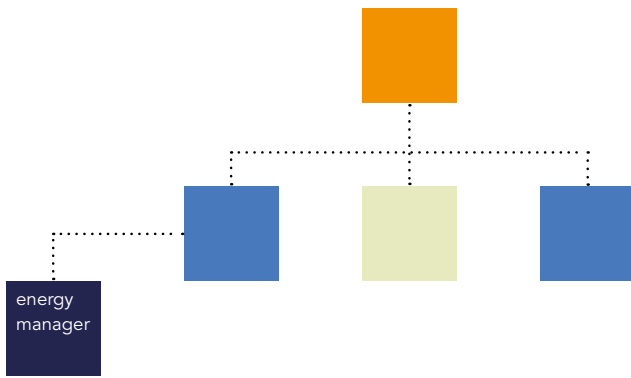
The ‘invisible energy policy project’ takes a deeper look at this puzzle. Our premise is that energy demand is deeply affected by ‘non-energy’ policies and priorities, such as those relating to consumer choice, health and safety, growth, austerity, security, or decentralisation.

For example

- The recent shift in Higher Education funding in England and Wales (with reduced state grants and increased tuition fees), combined with the end to student number quotas, has made student experience a top priority for universities, leading them to increase their investment in new facilities and energy-intensive showcase services such as 24 hour libraries.
- Austerity has led many government departments and public services to decrease the size of their estates, or to sub-contract functions to private sector-providers, with either real or apparent impacts on energy use and carbon emissions.
- Demand for transport is affected by policies on healthcare, including the siting of services, specialisation and decentralisation.

Non-energy policies can have a positive or a negative impact on energy demand but either way, their effects are often overlooked and unseen. This is why we call them ‘invisible energy policies’.

To understand why some energy policies are invisible, we need to consider how matters that affect energy demand are embedded within or excluded from non-energy policymaking. At the institutional level, energy managers are typically responsible for energy provision as well as energy reduction, however they have little or no influence over the energy demand consequences of non-energy policies. For example, energy managers in universities are expected to deliver reductions in carbon emissions, but may not have any role in major decisions around campus expansion, internationalisation or energy-intensive scientific equipment.



We argue that the way that boundaries are drawn between 'energy' and 'non-energy' issues is important. These boundaries exist on many levels, from the division of portfolios among government departments, to the job descriptions of individual employees. As well as boundaries in terms of responsibilities and remits, there are also more subtle boundaries, such as those between issues that are perceived as negotiable or tractable and those that are not; between evidence that is seen as legitimate and that which is not; and between things which are measured and those which are not. We aim to understand how these boundaries are made, what is included and excluded, and the implications for energy demand.

QUESTIONS AND SCOPE OF THE RESEARCH

The invisible energy project concentrates on the UK public sector, using examples from higher education, health and defence. The public sector is a major energy consumer, spending around £4bn each year¹, and is responsible for 10% of the UK's carbon emissions from buildings.

In line with the 2008 Climate Change Act, the sectors on which we focus have committed, with exceptions in some areas, to reducing their carbon emissions by 34% by 2020, against a 1990 baseline. This represents an enormous challenge. For example, emissions relating to higher education increased by 26% between 1990 and 2006.

The project addresses these questions

- How do non-energy policies affect energy demand?
- How are matters of energy demand integrated into non-energy policymaking and planning?
- Can non-energy policies be used to help reduce demand?

¹ DECC, *Single departmental plan: 2015 to 2020*.

RESEARCH DESIGN

Our strategy is to examine local as well as national energy and non-energy policies and processes. At the local level, we focus on case study institutions (such as universities), looking at how energy is managed, and how non-energy priorities affect demand. This case study method is complemented by an investigation of national-level policy, addressing the same questions but from a different point of view.

The research involves a combination of documentary analysis together with interviews with energy managers, facilities managers, and other senior administrators and with policymakers and regulators in BEIS, the DoH, the MoD and elsewhere. We will analyse relevant trends in energy consumption nationally and at our case study sites and identify the energy and non-energy policy 'drivers' involved.

We will also hold workshops with expert stakeholders to get feedback on our emerging findings.

POLICY AND PUBLIC SIGNIFICANCE

The project has significant implications for policy and practice. To reach its 80% 2050 carbon emissions reduction target, the UK will need to take demand-side measures which go well beyond the traditional focus on energy efficiency. In response this project will generate informed debate about the relations between energy demand and non-energy policy, and provide evidence and new ideas about where opportunities for demand reduction might lie.

THE RESEARCH TEAM

The invisible energy project, led from the University of Sussex, runs from October 2015 to May 2018 and brings together political scientists, sociologists, and experts on energy and transport policy, including

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