





Energy Biographies: Understanding the Dynamics of Energy Use for Energy Demand Reduction

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Introduction

Energy demand reduction bears upon multiple long-term national policy goals, including the transition to a low carbon economy, energy security and affordability, and mitigating environmental impacts. This research will contribute to knowledge about energy demand reduction by taking a novel approach that examines people's everyday energy practices as dynamic biographical processes (i.e. their 'energy biographies').

Research Objectives

- 1. To develop understanding of energy use by investigating and comparing people's different 'energy biographies' across a range of social settings.
- **2.** To examine how existing demand reduction interventions interact with people's personal biographies and histories.
- **3.** To develop improved understanding of which different community types can support reductions in energy consumption.
- 4. To explore the usefulness of innovative (narrative, longitudinal and visual) methods for helping people reflect on the ways they use energy.

Summary

Concerns regarding climate change and the security of energy supplies mean that the transition to a secure, affordable and low carbon energy system has become a key

Project Overview

The project addresses core issues of lifestyle and pro-environmental social change.

Project Duration: 3 years starting 1st July 2011.

Methods: Interviews, visual methods and qualitative longitudinal studies of people in 4 case sites (major city, hospital and 2 LCCC communities) to understand how people's views of energy and energy usage develop and change over time.

Rationale: As yet we do not have all the answers for how to encourage and achieve lifestyle change for lower energy usage.

Hypothesis: Understanding how energy usage develops and changes over time will lead to insights on how to intervene in the energy intensity of people's lives and create trajectories toward reduced energy use.

Policy Relevance: Our research will provide knowledge and understanding of potential new policy interventions that can help drive social change toward reduced energy usage across different communities and settings.

objective of UK energy policy. It is now widely accepted that to achieve this aim we need to focus not only on low carbon forms of energy production (e.g. through renewable technologies), but also innovative ways to reduce our consumption of energy - whether in the home, workplace or transportation. We know that achieving significant reductions in energy consumption by people is not easy, and strategies to reduce energy demand need to be informed by systematic research evidence showing how and why people develop and maintain particular energy intensive lifestyles and practices. The project takes an innovative biographical approach to this question, by investigating people's current energy use in terms of their own understandings of energy against the backdrop of their particular individual lifecourse trajectories. We term this novel methodological approach 'energy biographies'. The project brings together an interdisciplinary team with expertise in social psychology, geography and sociology based in two leading academic Schools within Cardiff University. It is being conducted in collaboration with government, institutional and grassroots organisation partners in four different social and community case locations: specifically, Ely and Caerau and Peterston Super Ely in Cardiff, an Eco-hamlet in Pembrokeshire and a large public sector hospital In London.

The project is structured around two main empirical phases of fieldwork, being conducted at each of the case locations.

Firstly, we are using individual interviews to access peoples' narratives and stories regarding their use of energy, and looking at how this relates to the different communities with which they identify. The interviews encourage participants to revisit key moments of their life histories (e.g. transition to adulthood) and aspects of their everyday life (e.g. established routines) to prompt an awareness of their personal investments in energy use. A key focus is on the life-course transitions that have served to intensify people's energy use in the past, as well as potential routes for change in the future. The interviews also encourage participants to discuss their own evaluations of existing energy reduction interventions in their own particular location.

Secondly, we are selecting a subset of our participants in each case location to engage in an extended period of more in-depth qualitative longitudinal research incorporating repeat interviews after a further 5 and 10 months. This allows us to create more complex and realistic understandings of how and why individual's energy biographies develop as they do, as well as the unintended and intended consequences of energy demand reduction interventions. These repeat interviews will be supplemented by use other methods (e.g. photography/cameras) to facilitate ongoing engagement with and understandings of the

everyday use of energy within the domains of home, leisure, work and transport.

The project is breaking new research ground by looking closely for the first time at how our use of energy is related to our understandings of our biographical past, as well as our hopes for the future. It is also novel in seeking to develop qualitative longitudinal methods of investigation in the area of energy demand and use. In addition to academic publications, an important practical outcome are the insights which can be delivered for our collaborating partners at the 4 case sites regarding their varied current energy demand reduction schemes and the impacts these are having upon our research participants.

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