JOB DESCRIPTION
Senior Research Associate, Flexibility project/Department of Sociology
Vacancy Ref: A3287

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Senior Research Associate, Department of Sociology</th>
<th>Present Grade:</th>
<th>7</th>
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<tbody>
<tr>
<td>Department/College:</td>
<td>Department of Sociology</td>
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<td>Duration:</td>
<td>24 months</td>
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<td>Directly responsible to:</td>
<td>Dr Stanley Blue</td>
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<td>Supervisory responsibility for:</td>
<td>N/A</td>
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Other contacts

Contacts:

Internal: Colleagues in the Sociology Department and in the Faculty of Arts and Social Sciences, together with colleagues in other faculties, the Library, ISS, central administration, conference office, finance and other relevant parts of the university.

External: Colleagues in the UK Centre for Research into Energy Demand Solutions (CREDS), especially those also working on the Flexibility theme. Professional bodies, employers, businesses, external suppliers of goods and services; UK government organisations, as well as academic networks and relevant research funding bodies.

Major Duties:

To develop and undertake research involved in the project *Time Dependence and Institutional Flexibility* as part of the Centre for Research into Energy Demand Solutions (CREDS). (For more information on the work of the Flexibility theme, see: [http://wp.lancs.ac.uk/flexibility/](http://wp.lancs.ac.uk/flexibility/))

While other projects in the Flexibility theme look at the historical, present, and future making of flexibility (see for example Blue et al. 2020) in energy demand, or how technologies matter for that flexibility, *Time Dependence and Institutional Flexibility* will investigate how the delivery and timing of core services shapes the ability of institutions to adapt the timing of services as a form of demand response.

While institutions already intervene to shape patterns of energy demand in various ways, current demand-side management (DSM) strategies tend to work in the background with the aim of minimising disruption to services. A more significant challenge is to exploit opportunities for adapting socio-temporal rhythms to better match peaks and troughs of renewable supply.

The aim of this project is to analyse the limits and possibilities of DSM interventions as a means of identifying institutional flexibilities and new opportunities for more extensive demand side response. This project has three related aims: The first is to work with energy service providers and electricity aggregators providing demand side response services to review interpretations of ‘baseline’ demand, in different organisations and sectors, that underpin current operational configurations and service provision and the related scope for flexible adaptation in the form of demand management strategies.

The second is to identify forms of time-dependence within particular institutions and organisations (e.g. schools, hotels, rail networks) that matter for critical peaks and patterns in energy use.

The third step is to develop new forms of demand-management that modify the timing (frequency, periodicity, duration, or sequence) within and between institutions.
The researcher will be involved in designing a method for examining the impacts, limits, and possibilities of existing demand-side management strategies, including interpretations of ‘baseline’ demand, of the scope for modifying the timing of energy consumption, and the contemporary forms of adaptation this might entail.

This will involve investigating the timing and organisation of services in three selected case study institutions.

These case studies will inform the development of a new approach to conceptualising and mapping the relation between institutional practices, timing and energy demand that will distinguish new possibilities for flexibility and demand side response within organisations.

The work includes selecting institutional sites, negotiating access, analysing energy/travel data, working with and interviewing key stakeholders to develop and disseminate a new-style of demand management focused on reconfiguring the timing of services that contribute to critical peaks in energy and travel.

- From this research, prepare and produce high quality publications (suitable for returning in future REF exercises), that challenge and develop practical and theoretical understanding of flexibility in energy systems and of how and why it changes; with the expectation that two journal articles are submitted before the end of the two year post.

- Organise, design and run two dissemination events for non-academic stakeholders;

- Produce case study reports for the participating institutions;

- Play an active part in disseminating the research in relevant fora – conferences, workshops, etc.;

- Contribute to the national and international research reputation of the Department and University more widely;

- Work within the strategic direction of the University as a whole and the University’s code of ethics and practice guidelines;

- Undertake other appropriate duties as required by Dr Stanley Blue.

References: