

Academically Advanced Socially Progressive

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Research Associate

Department	Civil and Environmental Engineering (www.strath.ac.uk/engineering/civilenvironmentalengineering/)		
Faculty	Faculty of Engineering (www.strath.ac.uk/engineering/)		
Staff Category	Research	Reference No	694058
Reports To	Head of Department/Institute	Grade	7
Salary Range	£37174 - £45413	Contract Type	Fixed Term (18 months)
FTE	1 (35 hours/week)	Closing Date	07/04/2025
Working Arrangements	Hybrid. The standard requirement across the University is that at least three days per week (based on IFTE) will be spent working on-site (with flexibility as appropriate).		
Work Location	John Anderson Campus, Glasgow		



Job Advert

A post-doctoral research associate is sought to contribute to a significant interdisciplinary research programme on low-carbon transport and energy systems as part of the UK Energy Research Centre (UKERC). The post-holder will co-lead the development of tools and methods to investigate the evolution of flexible mobility demands over time, place and key road transport modes (cars, vans, e-bikes), assessing the implications for electricity network operation of increasing electrification of vehicles. The post-holder will develop scenarios, enhance and deploy systems modelling frameworks, and deliver policy-focussed insights to stakeholders, including academia, government and the private sector to support decision-makers in the delivery of an affordable net-zero transport-energy transition.

The post-holder will work as an active member of UKERC Phase 5 Theme 2 “Operating a highly renewable and largely electrified energy system”, specifically co-leading research on Work Package 2.2 “Cross-sector and cross-scale coevolution and interoperability”. This workstream will be done in collaboration with researchers at Cardiff University, University of Birmingham and Imperial College London. UKERC is an independent whole systems energy research centre funded by UK Research & Innovation to address the challenges and opportunities presented by the transition to a net zero energy system and economy. For more information on UKERC, see <https://ukerc.ac.uk/>.

Job Description

Brief Outline of Job:

Co-lead the development of open-access transport-energy system modelling tools with collaborators at research institutions and universities in UKERC. Use the developed tools to produce policy-relevant research to stakeholders, including national and sub-national governments, academics and private companies. Contribute to wider programme of research in UKERC, including seminars, meetings, etc. Disseminate research at international conferences and through the publication of articles in high-impact peer-reviewed journals. Contribute to the development of new research bids at the Department of Civil & Environmental Engineering, University of Strathclyde.

Main Activities/Responsibilities:

1. Co-lead the development of an open-access tools and methods to investigate the evolution of flexible mobility demands over time and the impacts this creates for a low-carbon energy sector
 2. Contribute to other pieces of work that arise as part of Theme 2 in UKERC Phase 5, including managing delivery of multiple projects with partner institutions.
 3. Contribute to UKERC-level events, including workshops and conferences at partner institutions and otherwise.
 4. Publish research findings in internationally recognised scientific journals and policy briefs; disseminate through attendance at globally important conferences in the field.
 5. Contribute to the development of new research bids in the Department of Civil & Environmental Engineering in the field of sustainable transport and energy systems
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Person Specification

Educational and/or Professional Qualifications

(E=Essential, i.e. a candidate must meet all essential criteria to be considered for selection, D=Desirable)

- E1 Honours or Masters degree in a cognate discipline (e.g. engineering, economics, mathematics, geography, physical sciences)
 - E2 PhD (holder or working towards the completion of one) in a relevant discipline, or equivalent industrial/policy experience in a relevant topic.
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Experience

- E3 Evident ability to design and conduct research work.
 - D1 Experience of software development, preferably in Python.
 - D2 Good knowledge of climate mitigation in transport systems (e.g. Avoid, Shift, Improve)
 - D3 Good knowledge of other externalities in transport systems (e.g. air pollution)
 - D4 Good knowledge of academic literature regarding mathematical modelling of transport and energy systems at sub-national levels (e.g. optimisation, simulation, discrete choice modelling)
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Job Related Skills and Achievements

- E4 Ability to structure reports or academic papers in a clear and coherent manner and to clearly communicate complex ideas.
 - E5 Excellent interpersonal and communication skills, with the ability to listen, learn, engage and persuade, and to present complex information in an accessible way to a range of audiences.
 - E6 Ability to pick up and assimilate relevant information from a variety of sources.
 - D5 Ability to work in an interdisciplinary space, combining engineering and economic matters in discussing what “best practice” might be.
 - D6 Understanding of the broader context of this work, including wider societal aims and challenges.
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Personal Attributes

- E7 Ability to plan and organise own workload effectively, with evidence of having successfully completed research projects to interim milestones and completion.
 - E8 Enthusiasm, and keenness and ability to embrace and work constructively, both on own initiative and also within a team environment.
 - E9 Creativity, initiative and rigour in approaching questions of an engineering or economic nature.
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Application Procedure

Applicants should visit Strathclyde’s vacancies portal and complete an online application form including the name of three referees who will be contacted without further permission, unless you indicate you would prefer otherwise. Applicants should also submit a Curriculum Vitae and a covering letter detailing the knowledge, skills and experience you think make you the right candidate for the job. Applicants should also complete the Equal Opportunities Monitoring Form.

University of Strathclyde encourages the recruitment of disabled and neurodivergent candidates. If you need any reasonable adjustments during the recruitment process, please let us know. You are welcome to submit a paper application or a CV instead of the online application form by contacting us at humanresources@strath.ac.uk.

Interviews

Formal interviews for this post will be held on Thursday, 10 April 2025

The University is a Disability Confident Employer and operates a guaranteed interview scheme for disabled candidates who meet all the essential criteria for the post that they are applying for.

Other Information

Further information on the application process and working at Strathclyde can be found on our website (<http://www.strath.ac.uk/hr/workforus>).

Informal enquiries about the post can be directed to James Dixon, Lecturer in Transport (james.dixon@strath.ac.uk).

Conditions of Employment

Conditions of employment relating to the Research staff category can be found at: [Conditions of Employment](#).

Rewards and Benefits

Our comprehensive benefits package, including generous annual leave, family-friendly benefits, flexible work options, and a commitment to continuous learning, reflects our appreciation for the valuable contributions of our colleagues.

We understand that each staff member has unique priorities and lifestyles, so our diverse benefits ensure there is something for everyone, details of which can be found on our [Rewards and Benefits webpage](#).

- **Financial Rewards:** We provide attractive financial packages, including competitive salaries, relocation support for employees and a generous pension scheme, with university contributions of 14.5% for USS and 6.5% for LGPS.
- **Work-Life Balance:** We are dedicated to enhancing healthy work-life balance for our employees. We offer generous annual leave, an additional annual leave purchase option, flexible and agile work arrangements.
 - Annual Leave: Generous entitlement of 27 days (Grade 5 and below) or 31 days (Grade 6 and above), in addition to 11 public holidays and University closure days.
 - Additional annual leave purchase: Option to request purchase of 2 weeks' additional annual leave per year.
 - Flexible and agile working: The University provides flexible work arrangements. You can request arrangements that fit you and your role, such as hybrid, part-time, compressed hours, term-time, adjusted shifts, staggered hours. These requests can be made from the first day of your employment.
- **Family Friendly Benefits:** We offer a variety of enhanced family-friendly benefits to support our employees in balancing work and family responsibilities. These include Maternity Leave, Paternity/Maternity Support, Adoption Leave, Shared Parental Leave, Parental Leave, Carers Leave and support, Family Friendly Research & Scholarship Leave, and access to our on-campus nursery.
- **Career Development:** Our commitment to personal development is reflected in initiatives such as professional courses, subsidised educational programs, coaching and mentoring, leadership development, secondment opportunities, and access to our library.
- **Health & Wellbeing:** We place high importance on the safety, wellbeing, and health of all our staff and offer discounted Strathclyde Sport membership, an Employee Assistance Programme (EAP), Occupational Health Service, and Cycle to Work scheme.
- **Recognition Awards:** At Strathclyde, we place a strong emphasis on acknowledging and rewarding our staff's commitment and exceptional contributions. This is demonstrated through our Long-Service Awards and our Values-based Strathclyde Medals.

Probation

Where applicable, the successful applicant will be required to serve a 9 month probationary period.

Pension

The successful applicant will be eligible to join Universities' Superannuation Scheme Further information regarding this scheme is available from [Payroll and Pensions](#).

Relocation

Where applicable, the University offers a relocation package to support new employees who meet the eligibility criteria. The relocation package is offered as a contribution towards costs incurred, and is designed to be flexible, allowing staff to use the financial support available in the way that will be most helpful to them. Further details are outlined in the [Relocation Policy](#).

Equality and Diversity

The University of Strathclyde is a socially progressive institution that strives to ensure equality of opportunity and celebrates the diversity of its student and staff community. Strathclyde is people-oriented and collaborative, offering a supportive and flexible working culture with a deep commitment to our [equality, diversity and inclusion charters, initiatives, groups and networks](#).

We strongly encourage applications from Black, Asian and minority ethnicity, women, LGBT+, disabled candidates and candidates from lower socio-economic groups and care-experienced backgrounds.

The University currently holds an Athena Swan **Silver award**, recognising our commitment to advancing women's careers in science, technology, engineering, maths and medicine (STEMM) employment in academia.

University Values

The University's Values capture what we're all about: who we are, what we believe in and what we stand for. [Our Values](#) have been derived from how we act and how we expect to be treated as part of Strathclyde.

In delivering **our People Strategy**, we will contribute, act, and make decisions guided by these values.

- **People-oriented:** committed to our staff and students, providing opportunities, and investing in their development.
- **Bold:** confident and challenging in what we do, and supportive of embracing appropriate and managed risk in our decision-making.
- **Innovative:** focused on discovering and applying knowledge with impact and encouraging creative thinking and new ideas.
- **Collaborative:** working together, with our colleagues and external partners, with integrity and in an open, respectful way.
- **Ambitious:** for our institution, staff and students as well as supporting the ambitions of our partners.



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