Job Description

Lecturer in Energy and Transport

(Ref: 1724762)

Bartlett School of Environment, Energy and Resources

UCL Energy Institute

Location: Central House, 14 Upper Woburn Place, London WC1H 0NN

Grade 7, £38,581 - £41,864

(per annum, including London Allowance)

Reports to:

Tristan Smith, Reader in Energy and Transport.

Context

The **UCL Energy Institute** (UCL-Energy) is the University's mechanism for bringing together a wide range of perspectives, understandings and procedures in energy research, transcending the boundaries between academic disciplines. It brings together multidisciplinary teams, providing critical mass and capacity for large projects. In particular, the UCL Energy Institute develops and undertakes research in the area of energy-demand reduction, to improve energy security and facilitate a transition to a low-carbon economy.

At present, UCL has a research portfolio in energy of more than £25 million. It has world-leading expertise in more than 20 of its departments, including architecture, planning, law, psychology, statistics as well as more traditional energy areas such as mechanical and chemical engineering and the physical sciences. UCL is particularly strong in fundamental science and engineering (e.g. materials, machines), systems capability, energy demand (e.g. industry, transport, buildings) and context (e.g. social, economic, and legal). In addition it possesses further expertise in carbon capture and storage, energy-efficiency modelling, offshore generation and transmission, low-energy materials and aerodynamic design of turbo-machinery.

The UCL Energy Institute's **shipping group** sits within a wider energy and transport group encompassing work on aviation and surface transport. Started in 2010, the shipping group has led over £5m of RCUK funded research (www.lowcarbonshipping.co.uk), and a broad portfolio of grants from ETI, EU, philanthropic foundations and industry. The group works across academic, industry and policy fora, and is particularly active at the UN agency the International Maritime Organisation advising governments and industry associations on the GHG policy debates. The group manages a large portfolio of consultancy and enterprise activity operating under the innovative University Marine Advisory Services (www.u-mas.co.uk) in collaboration with the private company MATRANS.

The shipping group hosts a number of industry and grant funded PhD studentships working closely alongside the research grant and enterprise activities. Furthermore, from this September, the group will deliver two of the modules on the new Energy Systems Data Analytics MSc programme (Energy and Transport Analytics, and Spatial Analysis of Energy Data), in addition to the support the group already provides to the EPEE programme.

Main purpose of the job

As a core member of the Energy and Transport team's shipping group, this individual has an opportunity to participate in the development and expansion of the UCL Energy Institute's world leading work on shipping GHG reduction and related transport and energy demand teaching, research and enterprise. The successful candidate will be responsible for leading grant applications and delivering research projects, preparing and delivering teaching particularly in the new

UCL Energy ESDA MSc programme, and expanding the group's enterprise activity.

With the emphasis towards the disciplines associated with data analytics, the ideal candidate is experienced in quantitiative analysis, data-centric modelling and energy epidemiology. The candidate should have a background in transport and energy related topics and ideally the shipping sector.

Duties and responsibilities:

- **Research:** To add value to the Institute's research agenda by developing knowledge through engagement in funded research projects and publications in one or more of the group's research areas. See https://www.ucl.ac.uk/bartlett/energy/research/themes/transport/shipping.
- **Teaching:** To act as a module leader for one or of the ESDA modules (Spatial Analysis of Energy Data). To embed our research within student learning. To undertake supervision of MSc dissertations and PhD theses. See https://www.ucl.ac.uk/bartlett/energy/programmes/msc-energy-systems-and-data-analytics.
- **Enterprise:** To engage in activities relating to knowledge transfer, enterprise and impact, particularly building on the group's existing enterprise activity through UMAS. For example, engaging with the group's corporate partners and on joint research activities, engaging with government through consultancy and advising on public policy, and communicating with the public at large.
- **Enabling:** To undertake enabling activities, under the direction of the line manager.
- To carry out any **other duties** as are within the scope, spirit and purpose of the job as requested by the Institute's Director. As the duties and responsibilities change, the job description will be reviewed and amended in consultation with the Institute's Director. The post-holder is required to follow actively all UCL policies including Equal Opportunities policies.

Person specification

Criteria	Essential or Desirable
Experience and knowledge	
Postgraduate degree in computer science, economics or another quantitative field of the social or physical sciences	Essential
PhD which includes significant data science method and applications or extensive experience commensurate with a PhD	Essential
A specialism in transport and quantitative analysis	Essential
A background in multidisciplinary research	Essential
Teaching experience on data analysis or related subjects	Essential
Skills and abilities	
Evidence of experience in analysis of spatial data	Essential
Experience in data analysis relevant programming languages, and quality code development	Essential
Ability to work harmoniously with colleagues and students of all cultures and backgrounds	Essential
Ability to communicate clearly both orally and in writing, with students, academic and administrative staff at all levels	Essential
An understanding of transport energy demand and shipping energy demand	Desirable
Prior experience working on shipping energy analysis, and experience working with AIS data	Desirable
Aptitude for coordination and teamwork	Desirable
Ability to communicate with the public, government and industry	Desirable
Attributes	
Entrepreneurial flair	Essential
An ability to engage in stakeholder debates and to integrate observed behaviour into research, teaching and enterprise activity	Essential
Commitment to UCL's policy for equal opportunity	Essential
A passion for energy demand and GHG reduction	Desirable
An interest in solving multi-stakeholder commercial/regulatory system-wide challenges	Desirable

Apply

If you have any queries regarding the vacancy or the application process, please contact:

bseer-recruitment@ucl.ac.uk