Cambridge Judge Business School

Further particulars

**JOB TITLE:** RESEARCH ASSISTANT/ASSOCIATE IN CLIMATE CHANGE POLICY FOR THE ENERGY POLICY RESEARCH GROUP (EPRG) - FIXED TERM

**REPORTS TO:** ASSISTANT DIRECTOR, EPRG

**Background**

We are looking to appoint a Research Associate at Cambridge Judge Business School within the Economics and Policy subject group. The Research Associate will support a new multi-institution consortium focused on assessing greenhouse gas removal (GGR) technologies such as bioenergy with carbon capture and storage (BECCS) and direct air capture of carbon dioxide (DAC) in addition to other measures such as afforestation. According to most economic models, the ambitious targets laid out in the Paris Accord agreed in December 2015 will likely rely heavily on the extensive deployment of these GGR technologies. The focus of the consortium is on answering five key questions:

1. Under what conditions is meeting the Paris commitments possible?
2. How does the feasible portfolio of GGR technologies vary between regions?
3. What are the region-specific, rate-limiting steps in GGR deployment?
4. Can interregional cooperation reduce the cost associated with meeting the 2°C target?
5. How will GGR technologies interact with and provide value to the low carbon energy system?

The successful candidate will be based within the Energy Policy Research Group (EPRG) at Cambridge Judge Business School. This project will complement other EPRG research into deep decarbonisation in energy-intensive industries, electricity, heat and transport.

The research is being conducted as part of a consortium by UK research councils for the natural environment, engineering and physical science and economics and social sciences, which involves five partner institutions (Imperial College London, Cambridge, Oxford, University College London (UCL), and University of East Anglia). The Centre is dedicated to performing key fundamental research and coordination activities to help the UK to meet future energy targets. Existing integrated assessment models (IAMs) have relied heavily on such GGR technologies to meet ambitious climate objectives but have also been accused of having unrealistic constraints, e.g. in terms of the quantity of sustainable biomass that can be utilised, or the rate at which GGR technologies can be deployed. These factors have cast doubt as to the feasibility of actually meeting the Paris targets whilst avoiding significant co-disbenefits or unintended consequences. We intend to explore these questions as part of a comprehensive multi-scale modelling approach.

**The role**

Cambridge is responsible for overall coordination of the work package on the political economy and social license to operate of GGR technologies. The goals of the Cambridge-led element of the project are:
to conduct original analysis of the political economy of GGR technologies in comparative context, to examine social license to operate of different GGR technologies, to explore the framing of different GGR technologies, to understand the political limitations on scaling up of different configurations, to design realistic GGR deployment scenarios working closely with other partners in the project.

There are four main elements to the research:

**Framing GGR**

We will conduct focus groups with both the public and key stakeholders (NGOs, industry, government) and two to three large-scale nationally representative surveys (n=2000 in UK) to better understand how GGR technologies are framed.

**Social License to Operate (SLO)**

Drawing on studies of other emergent technologies such as fracking, biofuels and nuclear power and interviews with key stakeholders among NGOs and industry, we will explore SLO for CCS and bioenergy separately and then examine the implications for GGR technologies such as BECCS.

**Comparative political economy of scaling up GGR technologies**

We will examine how GGR technologies may fit in with national debates over climate and energy policy across several key countries. Drawing on our modelling results, we will focus on countries where GGR technologies will likely play a large role in the overall portfolio of actions. Our preliminary list includes the largest emitters such as the US, China, EU, and India and those with diverse energy economies including Australia, Brazil, Canada, Germany, South Africa and Saudi Arabia. It is also important to understand subnational dynamics, for example between provinces or regions. We will conduct surveys of and interviews with stakeholders from NGOs, industry, government as well as leading analysts and observers (e.g. academics and thinktanks) to develop our comparative analysis.

**Developing realistic scenarios**

Drawing on work conducted under the other PE sub-tasks, we will co-design scenarios together with colleagues at UCL to impose political economy constraints on the penetration of GGR technologies. We will attempt to design scenarios to explore questions such as: will certain GGR technologies (or geoengineering projects more broadly) be banned or curtailed under international law or within individual countries? What impact will concerns over distributional impacts, equity or levels of government support play on the scale and speed of deployment of GGR technologies?

One key goal of our research at Cambridge is to provide inputs into existing energy system modelling approaches and integrated assessment models (IAMs). We will be working closely with our project partners at UCL and their bottom-up TIMES model, both to help improve the specification of GGR technologies in their model, and to assist in scenario design. As part of this project, we also have close links with the modelling groups at IIASA (who will be developing a UK version of their techno-economic BeWhere model) and MIT (using their top-down EPPA model, a computable general equilibrium (CGE) model).

A PhD in a related area such as public policy, energy economics, applied economics, political science, or geography is essential and additional knowledge or background in adjacent areas is not necessary but
would be desirable. In addition, good writing skills and attention to detail are important to complete project tasks. The candidate will work closely with researchers at Imperial College and UCL, but they should be able to work independently and may also contribute to other aspects of the work of EPRG.

Our EPRG research team have broad expertise in economics, technology policy and political science. Our core research discipline is applied economics, within a framework that encourages collaboration between experts from different academic traditions, drawing on insights from engineering, political science and law.

MAIN RESPONSIBILITIES

The Research Associate is expected to contribute primarily to a programme of work being undertaken as part of a project ‘Comparative assessment and region-specific optimisation of GGR’ funded by Research Councils UK.

Given the nature of the cross-cutting work, we will be involved in all aspects of the project working closely with colleagues at Imperial College and economic modelling colleagues at University College London in particular, as well as others across the consortium as necessary.

The researcher is expected to conduct a series of interviews and focus groups on GGR technologies (and climate policy more generally) with relevant stakeholders and experts from government, industry, non-governmental organisations (NGOs) and academia. Stakeholders consulted will be drawn from a wide range of critical countries/regions, which is expected to include some or all of the following countries: the United Kingdom, Germany, United States, India, China, Brazil, Canada, Australia, South Africa, Saudi Arabia and perhaps others.

The project also has funding to conduct two to three large-scale public opinion surveys on subjects related to GGR technologies and on climate policy and energy technologies more widely. As such, applicants will be expected to have a good working knowledge of econometrics and be able to design and analyse a large-scale survey (the surveys themselves will be carried out by professional public opinion research firms).

The research will build on our existing work and expertise within EPRG (and at the Clean Fossil and Bioenergy Research Group and the Centre for Environmental Policy at Imperial College and at the Energy Institute at UCL).

In addition, the research associate will be expected to contribute to other aspects of EPRG’s work programme, participate in our weekly seminars, publish in our working paper series, and engage with other researchers at EPRG and Cambridge Judge Business School more widely. The researcher is expected to actively engage with the other project partners at Imperial, UCL, Oxford and UEA, and, in particular, to work closely with relevant Post-Doctoral Research Associates at the other universities.

Travel between the partner universities is built into the grant to foster closer collaboration as is travel to carry out interviews and focus groups in the relevant countries as part of the comparative political economy research.
The person

The ideal candidate should be able to demonstrate most, if not all of the following qualities, skills and attributes. You are asked to provide a covering letter demonstrating how your own experience meets some or all of these requirements.

ESSENTIAL CHARACTERISTICS:

- PhD in Public Policy, Political Science, Economics, Geography, or other relevant discipline.
- Strong qualitative research skills, such as experience in designing and carrying out interviews, focus groups and stakeholder surveys.
- Strong quantitative skills, particularly in applied econometrics.
- Knowledge of climate change policy and/or energy economics and policy.
- Demonstrated ability to design, conduct, analyse and write up survey research.
- Excellent writing skills and attention to detail.
- Able to work independently and as part of an interdisciplinary and collaborative project.
- Driven and committed, demonstrating initiative and self-motivation.
- Good time management and planning skills with an aim to produce relevant academic papers in leading international academic journals.

DESIRABLE CHARACTERISTICS:

- Experience with economic modelling and in particular experience with integrated assessment models (IAMs) used in analysing international energy and climate policy.
- Knowledge of one or more greenhouse gas removal (GGR) technologies.
- Knowledge of one or more languages used in any of the key countries where research will be conducted.

Benefits

The salary will be in the range £28,936-£38,833 per annum. Our preference is to appoint someone with a PhD in hand, but successful candidates at Research Associate level who have not been awarded their PhD by the appointment date will be under-appointed as a Research Assistant (Grade 5) employed on a salary of £28,936 per annum. Upon award of the PhD the individual will be promoted to Research Associate (Grade 7).

This is a fixed term appointment for two years, which will include a six-month probationary period. Holiday entitlement is 33 days per annum plus eight days of public holidays.

The full incremental salary range for the position is advertised in order to demonstrate the progression for the Grade. In the majority of cases appointments will be made at the Grade minimum; only with experience beyond in very specific circumstances can a higher salary be offered.

The University of Cambridge comprises more than 150 departments, faculties, schools and other institutions, plus a central administration and 31 independent and autonomous Colleges. It is one of the world’s oldest and most successful Universities, with an outstanding reputation for academic achievement and research.

With excellent benefits, extensive learning opportunities and a stimulating and attractive environment, the University of Cambridge is a great place to work. Our employees are eligible for a wide range of competitive benefits and services. We give them access to numerous discounts on shopping, health care,
financial services and public transport. We also offer final salary pensions and tax-efficient bicycle and car lease schemes.

We have two nurseries and a holiday play scheme to help support those with childcare responsibilities and we offer various types of family-friendly leave to aid employees' work-life balance. In addition, we operate a number of initiatives to promote career development, health and well-being.

Further details can be found at www.admin.cam.ac.uk/offices/hr/staff/benefits. There is also a range of information about living and working in Cambridge at www.jobs.cam.ac.uk/job.

Application arrangements

To submit an application for this vacancy, please search for this position on the University's Job Opportunities website at www.jobs.cam.ac.uk and click on the "Apply online" button at the bottom of the relevant job description. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

The closing date for applications is 15 March 2018.

Applicants are required to provide details of two referees. These will not be contacted unless the applicant is shortlisted. We expect to conduct interviews of shortlisted applicants shortly after the closing date in March.

Equality of opportunity at the University

The University of Cambridge is committed to a proactive approach to equality, which supports and encourages all under-represented groups, promotes an inclusive culture and values diversity. Entry into employment with the University is determined by personal merit and by the application of criteria required for the post. No applicant for an appointment or member of staff will be treated less favourably than another on the grounds of sex (including gender reassignment), marital or parental status, race, ethnic or national origin, colour, disability (including HIV status), sexual orientation, religion, age or socio-economic factors.

The University has various diversity networks which help it to progress equality; these include the Women’s Staff Network, the Disabled Staff Network, the Black and Minority Ethnic Staff Network and the Lesbian, Gay, Bisexual and Transgender Staff Network. In addition, the University was ranked in the top 100 employers for lesbian, gay and bisexual (LGB) staff in Stonewall’s Workplace Equality Index 2011.

Information if you have a disability

The University welcomes applications from individuals with disabilities and is committed to ensuring fair treatment throughout the recruitment process. Adjustments will be made, wherever reasonable to do so, to enable applicants to compete to the best of their ability and, if successful, to assist them during their employment.

We encourage applicants to declare their disabilities in order that any special arrangements, particularly for the selection process, can be accommodated. Applicants or employees can declare a disability at any time.
Applicants wishing to discuss any special arrangements connected with their disability can, at any point in the recruitment process, contact, a member of Cambridge Judge Business School's HR team who are responsible for recruitment to this position, on (01223) 768497 or by email on hr@jbs.cam.ac.uk. Alternatively, applicants can contact the HR Business Manager responsible for the department they are applying to via hrenquiries@admin.cam.ac.uk.