CANDIDATE BRIEF

Research Fellow in Climate Finance Analytics, Faculties of Environment and Business

Salary: Grade 7 (£35,333 – £42,155 p.a.)

Reference:LUBEE1004

Two full time posts are available

SEE role is fixed-term for 30 months – due to external funding

LUBS role is fixed term until 31 March 2024 – due to external funding

We will consider job share / flexible working arrangements as well as hybrid/remote working.

Research Fellow in Climate Finance Analytics
School of Earth and Environment, Faculty of Environment and Leeds University Business School

Are you a researcher with demonstrable expertise in the analysis of climatological data and the implementation and interpretation of climate model projections? Do you have a demonstrable interest in engaging with stakeholders, particularly in public policy and the financial sector? Do you have a background within climate science?

Successful candidates will report to Professor Jason Lowe in the School of Earth and Environment and Professor Iain Clacher, of Leeds University Business School, and will be part of the UK Centre for Greening Finance and Investment (CGFI). The researchers will contribute to the CGFI workstreams on generating and using data and analytics, and directly to the flagship on pensions and asset management.

Both candidates will focus on the evaluation of climate data and the tailoring of this data for use in financial analytics. One candidate will focus more on the understanding and evaluation of the physical credibility of the data as part of the Data and Analytics workstream. This will include tailoring and use of the data for financial analytics across all flagship areas of CGFI. The second candidate will focus more on the pensions and asset management flagship. Together the candidates will ensure appropriate climate data is used and that methods are fit for purpose.

The Data and Analytics workstream is the largest of CGFI and is the core engine of world-leading translational research and innovation within CGFI. The successful candidate will provide new understanding on selecting and applying appropriate climate science, analyses and modelling within financial decision making. Primarily this will draw on pre-existing climate model data and includes, for example, evaluating the performance of model simulations of extremes, assessment of robust across modelling approaches, scenario development and production of climate hazard and risk assessments suitable for helping financial institutions to manage physical-climate related risks and align their financing with resilience and adaptation goals. These goals include areas such as climate disclosure, risk management, stress testing and scenario analysis. While the other candidate will undertake the same activities but with a focus on the translation of these climate related risks for the pensions and asset management industry.

Both candidates will also work closely with collaborators across CGFI (particularly, Universities of Oxford, Imperial, Bristol, and Reading) to contribute to the development of cross-cutting underpinning methodological advancements, including new approaches to describing and characterising confidence levels, treatments of uncertainty in bringing together disparate data and models, approaches to characterising compounding and correlated risks, and tail-risk scenarios. The candidate will apply these to a range of hazards, which could include sea level, heat waves, drought, flood, and wildfire and will work as part of multi-disciplinary teams to connect science with decision-making approaches relevant to financial institutions.

Some experience of working with climate model data will be essential for the role and both researchers will work in one of the most cutting-edge areas in climate research with high societal impact. Qualified candidates must demonstrate a commitment to research excellence and impact in the relevant disciplinary field.

What does the role entail?

As a Research Fellow, your main duties will include:
- Applying, developing and implementing methods for analyses of climate-related hazards and risks for use in the finance sector, with a focus on extreme events including sea-level rise, heat waves, floods, and droughts using global and regional climate models and observational data. This will include issues of model evaluation, assessing the robustness of future projections, bias correction, and quantification of uncertainties;
- Actively participating in and leading tasked scientific activities and contributing to the scientific development of the project;
- Contributing to and leading publications in highly ranked peer-reviewed academic journals, as well as book chapters, reviews, and position papers; presenting papers at national and international conferences, and leading seminars to disseminate research findings to internal and external stakeholders as well as wider groups and communities across financial services in the UK and beyond;
- Exploring further opportunities for novel research on climate uncertainties, scenario development, risk assessment, and attribution of extreme events;

- Engaging with stakeholders from the finance sector and working with them to develop climate risk analytics of relevance to decision making in a wide range of use-cases;
- Participating actively as part of the CGFI and a member of the University community, including collaborating with CGFI partner universities;
- Generating and pursuing independent and original research ideas in the appropriate subject area;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own work;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a Research Fellow you will have:
- A PhD/DPhil or near completion - i.e. the initial thesis needs to have been handed in at the point of application in atmospheric physics, meteorology, or climatology or a closely allied discipline;
- Strong interest in climate risk analytics and the assessment and management of climate-related financial risks, including interest in working with financial institutions;
- Good scientific programming skills and experience in python and can propose and develop new mathematical methods and implement them in computer code in python and its libraries;
- Practical experience of interpreting the outputs from complex computer models ideally including extreme value statistics, time series analysis, spatial statistics and dealing with model ensembles;

- Ability to write scientific text and translate scientific findings into every-day language;
- Ability to work collaboratively as a member of a global interdisciplinary research team, including a range of internal and external stakeholders;
- Ability to plan and manage their own work, achieving agreed objectives within defined timescales;
- Excellent written and verbal communication skills including presentation skills;
- A strong commitment to your own continuous professional development.

You may also have:
- Experience in climate hazards for risk assessment and/or applying climate science, models and analysis in practice in decision making;
- Publication history in understanding or quantifying the physical climate system using model outputs;
- History of tailoring climate model outputs for user applications.

How to apply

You can apply for this role online; more guidance can be found on our How to Apply information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

Professor Jason Lowe
Email: J.A.Lowe@leeds.ac.uk

Professor Iain Clacher
Tel: +44 (0) 113 343 6860
Email: I.Clacher@leeds.ac.uk

Additional information

Please note: If you are not a British or Irish citizen, from 1 January 2021 you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen and resident in the UK before 31 December 2020, this may be your passport or status under the EU Settlement Scheme.

Find out more about [CGFI](#)

Find out more about the [Faculty of Environment](#)

Find out more about the [Faculty of Business](#)

Find out more about our [School of Earth and Environment](#)

Find out more about the Faculty of Environment [Research and associated facilities](#)

Find out more about the Faculty of Business [Research and associated facilities](#)

Find out more about [equality](#) in the Faculty.

Our University

At the University of Leeds, we are committed to providing a culture of inclusion, respect and equity of opportunity that attracts, supports, and retains the best students and staff from all backgrounds. Whatever role we recruit for we are always striving to increase the diversity of our community, which each individual helps enrich and cultivate. We particularly encourage applications from, but not limited to Black, Asian, people who belong to a minority ethnic community; people who identify as LGBT+; and disabled people. Candidates will always be selected based on merit and ability.

The Faculty of Environment has received a prestigious Athena SWAN silver award from [Advance HE](#), the national body that promotes equality in the higher education sector. This award represents the combined efforts of all schools in the Faculty and shows the positive actions we have taken to ensure that our policies, processes and ethos all promote an equal and inclusive environment for work and study.

Working at Leeds

We are a campus based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our Working at Leeds information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our Accessibility information page or by getting in touch with us at disclosure@leeds.ac.uk.

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position, however, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be, in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our Criminal Records information.