



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

UK Centre for Greening Finance and Investment (CGFI)

Postgraduate Researcher (PGR MSc or PhD) Industry Internship



Salary: Grade 6 (£32,296 – £37,999 p.a.)

Reference: BUSAF1016

Closing date: 26 January 2025

Fixed term (6 months to complete specific time limited work) available from 1 February 2025 full time (37.5 hours per week)

Location: UK CGFI Leeds Innovation Hub, Nexus – University of Leeds, Discovery Way, Leeds LS2 3AA (with scope for hybrid working)

‘We are open to discussing flexible working arrangements.’

UK Centre for Greening Finance and Investment (CGFI) Postgraduate Researcher (PGR) Industry Internship

Internship opportunity in partnership with Priestley Centre for Climate Futures and Bank of England

Are you a current University of Leeds postgraduate researcher (MSc Research or PhD) who is currently enrolled (and can pause your research) or a recent graduate (within the past 6 months)? Are you looking for an exciting and impactful internship opportunity? Do you have an interest in helping the Bank of England use climate information, including a case study investigating the potential impact of climate change on UK residential property? Would you like to gain valuable experience and apply your skills in the finance industry?

Must be available to work full-time in the UK from 1 March 2025 (at the latest), with 2-3 days in the UK CGFI Leeds office / Bank of England Leeds office.

The [UK Centre for Greening Finance and Investment \(CGFI\)](#) is a national centre established to accelerate the adoption and use of climate and environmental data and analytics by financial institutions internationally. It aims to unlock opportunities for the UK to lead in greening finance and financing green. It involves several Universities (Bristol, Imperial, Leeds, Oxford, Reading), research institutes and stakeholders from the finance sector.

[UK CGFI Leeds Innovation Hub](#), based at Nexus – University of Leeds, acts as a platform to connect wider UK science and innovation with financial institutions, providing a route by which needs are understood and the latest climate and environmental science is made accessible, commercialised, and exported globally, placing the UK as global hub for climate and environmental analytics (CEA) for financial institutions.

The **Leeds Innovation Hub and the Bank of England are collaborating** on a project focused to understand how to select and describe different sources of climate information, with a case study focusing on how and where climate change might directly impact UK residential property. We are seeking a current or recently completed Leeds postgraduate researcher (PGR) to join us as an intern for this exciting project.



This role offers the opportunity to work in a professional office environment, collaborating with industry partners in the finance sector, including regulators and policymakers.

Based at the Leeds Innovation Hub, you will have the opportunity to work with post-doctoral researchers and leading regulator and policy makers on how different climate information is selected for use in financially related impact studies. The project will use a case study relevant to the Bank of England focusing on climate impacts on residential property in the UK.

The collaborative partner, the Bank of England, will work closely with the researcher, including by leading on the conversion of future weather projections into flood information and working with the researcher on estimating the financial cost of climate damage.

The intern will be responsible for delivering outcomes associated with the collaborative project, including selecting appropriate climate data, intercomparing alternative climate datasets and converting the climate data into a form that can be used in the Bank of England modelling. Additionally, the researcher will play a major role in writing up the results in a form the Bank of England can use.

To achieve this, the intern will be a visiting researcher at the Bank of England and will be co-supervised by their climate lead. Engagement with the wider Bank of England team and researchers at the University of Leeds CGFI innovation hub is crucial to ensuring the project meets the needs of the Bank of England, and seamlessly connects with their own research.

The position will be employed at [Leeds University Business School](#), and also have connection to the [Priestley International Centre for Climate](#), and the [Bank of England](#).

Main duties and responsibilities

- **Climate Model Comparison:** Analyse outputs from various climate models to understand the assumptions driving variations for two emission scenarios up to 2070.



- **Downscaling Approaches:** Compare outputs from different downscaling methods for various climate/weather events (e.g., floods, precipitation, wind, heat).
- **Damage Functions:** Evaluate different damage functions that translate climate/weather events into direct impacts on residential real estate, focusing on physical damage costs and house price impacts (led by BoE).
- **Impact Distribution:** Combine outputs from the above analyses to create a distribution of potential impacts (led by BoE with intern input).
- **UK Hotspots Identification:** Identify potential UK hotspots by analysing the significance of emission pathway uncertainty, natural variability, and model uncertainty. Express these hotspots in terms of hazard and risk/impact (led by BoE with intern input).
- **Real Estate and Mortgage Default Rates:** Consider how climate-driven damage to real estate affects expected mortgage default rates, influencing current valuations and capital treatments. This step will be led by BoE and is likely outside the intern's report scope, but the intern will gain an understanding of the overall research aims from a regulatory perspective.

This will involve:

- Collaborating with UK CGFI researchers to leverage their expertise in financial climate risk.
- Working with the Bank of England to:
 - Build a model test framework that combines vendor platforms, UK climate data inputs and Bank of England financial models to test the impact of modelling choices for the various links in the modelling chain.
 - Produce a paper that explores how uncertainty cascades along the modelling chain, from emissions scenario to mortgage impairments, and concludes on how to best match scenario construction options with financial uses cases from strategic planning to capital assessment.

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.

Outcomes

- **Enhanced Risk Management:**



- Better manage risks associated with climate change and market fluctuations.
- Improved response to early warning indicators as climate pathways and policies become clearer.
- **Informed Decision-Making:**
 - Multi-decadal view aids in making informed decisions on mortgage products.
 - Better understanding of market expectations and uncertainties for resilient financial products.
- **Improved Portfolio Resilience:**
 - Identify portfolio vulnerabilities and take proactive risk mitigation measures.
 - Enhanced adaptation to future climate impacts and policy changes for long-term stability.
- **Documentation and Feedback:**
 - Document models with the new taxonomy, providing valuable experience and feedback.
 - Standardise approaches to climate risk assessment and adaptation measures.

Impacts

- **Critical Analysis of a Suite of UK Physical Scenarios:** enhanced understanding and risk identification: Helps identify specific risks and vulnerabilities within the real estate sector, enabling better risk management strategies.
- **UK CGFI Taxonomy Analysis for Each Scenario:** standardisation and improved decision making.
- **Report Incorporating Critical Analysis and Taxonomy:** comprehensive insights and policy guidance.

Qualifications and skills

Essential

- **Current Enrolment:** Must be a University of Leeds postgraduate researcher (MSc Researcher or PhD) who is currently enrolled (and can pause their research) or has recently graduated (within 6 months).



- **Basic Understanding of GCMs:** Familiarity with global circulation models (GCM) models of the climate and how variations in sophistication and resolution impact regional climate pathways under different emissions scenarios.
- **Awareness of Climate Downscaling:** General knowledge of climate downscaling methodologies used to develop acute weather event distributions from chronic climate pathways.
- **Introductory Data Analysis Skills:** Capabilities, such as use of python, to investigate how scenario uncertainty and model uncertainty combine through the modelling chain from GCM to economic damage function.

Desirable

- Appreciation of how chronic and acute climate pathways are translated into economic damage functions.

Additional information

Do you need approval to pause your MSc Research or PhD studies?

If you are an existing MSc Research student and need to pause your studies, please include your supervisor's contact details and confirmation of approval in your supporting statement.

Location

UK CGFI Innovation Hub, Nexus – University of Leeds and Bank of England Leeds Hub, City Centre (with scope for hybrid working).

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.

Our University and School

As an international research-intensive university, we welcome students and staff from all walks of life. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education.



At Leeds University Business School we work hard to ensure that our shared University values (collaboration, compassion, inclusivity and integrity) guide all our activities. We are committed to developing our culture so that we are able to work together to deliver our purpose to “make an exceptional impact on the economy, society and the planet”. We aim to do this by pursuing our goals of developing innovative solutions for society and building a community of responsible leaders.

Everyone at the Business School has a part to play in realising this vision - whether you are involved in education, research, external engagement or professional support. Everyone has skills, knowledge, talent and experience of value - we all have something to offer and we all have a part to play in contributing to collective success. This is at the heart of who we are and how we treat one another. We want all colleagues to feel excited about going to work, to feel valued, to be challenged, to feel part of something bigger and to have fun along the way. To make this a reality we expect all colleagues to champion our shared values, to help us to strengthen our culture and to contribute to our common purpose.

We are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and 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 Priestley International Centre for Climate brings together world-leading expertise in all the key strands of climate change research. Climate change and its impact on society and ecosystems is a global challenge. The Centre is providing international solutions to meet this challenge.

Effective policy and other social and technical solutions need to be underpinned by robust research and the Priestley Centre’s focus is on new interdisciplinary research partnerships that link our physical, technological, economic, and social understanding of climate change with strategies for mitigation and adaptation.

Nexus brings together the brightest minds from business, technology, and academia. The Nexus community of high growth businesses is located across the globe but has its physical base in a state-of-the-art innovation hub on the University of Leeds campus.



Nexus provides bespoke support to help stimulate innovation and deliver rapid commercial impact and helps to bridge the gap between business and academia, to enable new and established businesses to thrive.

Information for disabled candidates

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our [How to Apply](#) information page or by getting in touch by [emailing HR via hr@leeds.ac.uk](mailto:hr@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 page.

Salary Requirements of the Skilled Worker Visa Route

G6 - Please note that due to Home Office visa requirements, this role may only be suitable for first-time Skilled Worker visa applicants if they are eligible for salary concessions. For more information, please visit [the Government's Skilled Worker visa page](#).

