ULTIMATE VISION

Financial institutions able to access and use climate and environmental data and analytics for:

- Any point on earth
- Past, present, and future
- Every major sector
- Material climate and environmental factors

SUCCESS WILL MEAN

- Enhanced solvency of financial institutions
- Reallocation of capital towards green
- Resilient global financial system
- Realise the opportunity for UK plc
AIMS AND OBJECTIVES

The ultimate vision of CGFI is for financial institutions being able to access and use consistent, timely, and appropriate climate and environmental data and analytics for any point on planet earth historically, in the present, and projected into the future, for every major sector, and for the complete spectrum of material climate and environmental factors.

- Deliver quality-assured, relevant, well-described, scientifically robust, and openly accessible climate and environmental data and analytics to all financial institutions, suitable for a wide range of use cases.
- Implement an open, interoperable data, and information e-infrastructure that will provide an easy-to-use platform for practitioners to access, build-off and integrate the climate and environmental data and analytics, from CGFI and others, and combine with their proprietary data and analytics.
- Co-develop flagship use cases with financial institutions that demonstrate the benefits of integrating climate and environmental analytics and produce open risk frameworks, indicators, and analytics, underpinned by the best available science and robust translational research.
- Create a focal point for UK and international outreach and for stakeholders to engage and access CGFI services, training, data, and capabilities.
- Mainstreaming ‘spatial finance’ – the integration of geospatial data and analysis into financial theory and practice – will be one of the key priorities for CGFI. Space is now the finance frontier.

SUPPORTING A VIBRANT ECOSYSTEM OF CLIMATE AND ENVIRONMENTAL SERVICE PROVIDERS, INCLUDING PHYSICAL HUBS IN LONDON AND LEEDS
CGFI will also act 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 a global hub for climate and environmental analytics for financial institutions.

Through these activities, the CGFI will:

- Enhance the solvency of individual financial institutions in the UK and globally and so contribute to the resilience of the global financial system as a whole for all, as well as the efficient pricing and reallocation of capital away from assets at risk to those that are more resilient.

- Underpin the development and the growth of UK green finance-related products and services.

- Enable a vibrant ecosystem of UK enterprises providing climate and environmental analytics and realise the opportunity for UK plc of being a world-leader in the creation and provision of climate and environmental services.
WHY?

Climate and environmental risks to our economy and society are accelerating. This includes climate-related physical risks such as floods, storms, and changing growing seasons; climate-related transition risks such as carbon pricing and climate litigation; and environmental risks such as biodiversity loss. It is now well accepted that climate and environmental risks can strand assets across multiple sectors and pose a threat to the solvency of financial institutions. This can cause cascading effects with the potential to undermine financial stability.

The UK is a world-leader in green finance. The UK Government has been accelerating green finance through its Green Finance Taskforce and Green Finance Strategy, as well as its Presidency of COP26. The Bank of England has been instrumental in driving developments in supervisory frameworks globally to promote a greening of the financial system, including through the G20 Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD) and the Network of Central Banks and Supervisors for Greening the Financial System (NGFS). UK financial institutions have played a key role in green finance innovation.

Yet, despite these advances and leadership in almost every aspect of green finance, financial institutions cannot secure the data and analytics needed to properly measure and manage their exposures to climate and environmental risks. While the last decade has seen the exponential growth of climate and environmental data, as well as improved analytics and methods, often produced by world-leading UK science, the vast majority of this has not found its way into decision-making by financial institutions. The CGFI has been established to resolve this disconnect.
The adoption of climate and environmental analytics will ensure that climate and environmental risks can be properly measured, priced, and managed by individual financial institutions and across the financial system. This is also a necessary condition to ensure that capital is allocated by financial institutions towards technologies, infrastructure, and business models that lower climate and environmental risks, which are also those required to deliver the net zero carbon transition, climate resilience, and sustainable development. These twin tracks - greening finance and financing green - are both enabled by climate and environmental analytics being appropriately used by financial institutions.

The market for ESG data, of which climate and environmental data is a large part, is expected to reach US$1bn in 2021 and grow annually by 20\%\(^1\). It is our view that this is a significant underestimate of future growth potential. Further, the benefits of properly pricing climate and environmental factors, avoiding investments in at-risk assets, and improving the efficiency of capital allocation for society more broadly, are significant. Reallocating capital will help to close the gap in investment required for successful climate mitigation and adaptation, which are estimated at multi-trillion dollars of additional investment per year\(^2\). The UK is well placed to capture these opportunities given its world-leading climate and environmental science and green finance leadership.

\(^1\) Bradford, H. ESG data market poised to hit $1 billion in 2021. Pensions & Investments (2020).

CREATING A NEW NATIONAL CENTRE

In February 2020 a call for proposals (‘Climate and Environmental Risk for Resilient Finance’) was launched by the Natural Environment Research Council (NERC) and Innovate UK, both part of UK Research and Innovation (UKRI), for a new £10 million research and innovation centre to support the integration of the financial risks of climate and environmental change into mainstream financial decision-making. This was one of the key recommendations made by the UK Green Finance Taskforce in 2018 and contained in the UK Green Finance Strategy in 2019.

A consortium led by the University of Oxford Smith School of Enterprise and the Environment was selected to establish the CGFI in December 2020 with this announced in early 2021. CGFI will begin its work at the start of April 2021 ahead of COP26.
THE TEAM

To achieve this exciting vision, the CGFI consortium brings together a world-leading, multidisciplinary team. The senior leadership team are all globally recognised experts in their respective fields with a track record of delivering high-impact research, tools, analytics, and information relevant to a range of financial institution needs.
In its first year, the CGFI is kick-starting five flagship projects developed in consultation with our partners.

These are collaborative projects where CGFI and partners work together to co-create open outputs tailored to a well-defined user need in an area that could lead to significant change in financial practice. Each flagship will work closely with one or more financial institutions as sponsors to develop tailored solutions.
SCALABLE FOUNDATIONS

From across the flagship projects, the CGFI will draw out products, learning, and good practice that will be shared in the form of standards, guidance, data and analytical products that will be openly available to all.

Each flagship will share a common foundation in being based upon robust asset-level data that can be aggregated up to inform asset-specific, portfolio-level, or macro-financial stability considerations.

Together they form a set of building blocks that cover the key risks, use cases, asset classes, and users, covering trillions of assets.
Five major UK universities plus a range of partner institutions reflects our strategy to bring together the diverse range of expertise, across climate and environmental risks, disciplines, financial institutions, and geographies, required both to meet the needs of financial institutions now and to create the strong, broad foundation necessary to scale-up the envisioned world-leading national centre for the long-term.

Our broad base of expertise includes climate, earth systems and environmental science, geography, computing, data science, mathematics, water, engineering, systems science, statistics, economics, business, innovation, decision science, and finance, and our team includes both career researchers and those with practitioner backgrounds.
HOW TO ENGAGE

CONTACT US

For more information and to engage with the Centre, contact us at the address below.

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