UK science and finance working together to green global finance

The availability of good climate and environmental data is a necessary condition for greening global finance. Armed with better information, financial institutions around the world will be much better placed to make decisions that contribute to a more sustainable planet. But access to scientifically robust climate and environmental data and analytics is patchy and unreliable. While the last decade has seen enormous growth of such data, as well as improved scientific methods, the vast majority of this has not found its way into finance sector decision-making.

To help ensure climate and environmental data is placed at the heart of global finance, a new national research centre has been announced today with £10m of seed funding. The UK Centre for Greening Finance and Investment (CGFI) aims to ensure that financial institutions can access climate and environmental data for any point on planet earth now and projected into the future, and for every major sector. CGFI will support lenders, investors, and insurers make environmentally sustainable decisions to help realise a greener global economy.

The UK is perfectly placed to transform the availability of climate and environmental data in finance. We have world-leading capabilities in all the various areas that need to come together to solve the problem. This includes deep expertise in climate and environmental science, earth observation, data science and artificial intelligence and, of course, finance and financial services. Outside of the UK only a handful of jurisdictions have this combination of resources and expertise.

Making this data available at the scope and scale envisaged has only become possible in the last few years as a result of rapid developments in science and technology. In particular, a virtuous cycle of cheaper earth observation satellites in orbit, rapid developments in artificial intelligence and cloud-based computing for interpreting datasets quickly, and continuous improvements in predictive modelling. Mainstreaming 'spatial finance' – the integration of this torrent of new geospatial data and analysis into financial theory and practice – will be one of the key priorities for the new centre. Space is now the finance frontier.

The CGFI will help to position the UK at the forefront of these and other related green finance innovations, providing data and information on which to build new financial products and services, working closely with companies and new start-ups, and helping to create an environment that catalyses innovation and green jobs in the UK.

This is a significant commercial opportunity. The market for ESG data, of which climate and environmental data is a large part, is <u>expected</u> to reach US\$1bn in 2021 and grow annually by 20%. There is a large and time limited opportunity for UK plc to be a world-leader in commercialising these products and to shape the direction of a large future financial data market.

CGFI will begin operations in April, ahead of this year's COP26 UN climate summit in Glasgow. The nucleus of CGFI is funded by UK Research and Innovation and the centre is led by the University of Oxford. There are a range of partner institutions, including the Universities of Bristol, Leeds, Reading, and Imperial College, as well as The Alan Turing Institute and the Satellite Applications Catapult, and the Science and Technology Facilities Council. In the summer a full range of financial institution and corporate partnerships will be announced.

CGFI will focus where there are gaps in data availability and will work closely with private sector providers so they can use open access data to create new products and services. The CGFI has a clear mandate to support innovation and will help to support new enterprises in particular through a partnership with InnovateUK. Two new physical hubs in London and Leeds will support companies and start-ups commercialise products, including tools that measure storm risk facing properties and the pollution created by companies and the liabilities that result. The CGFI will also work closely with finance professions, from actuaries to financial analysts, to ensure that every professional financial decision takes the environment into account.

The new national centre demonstrates how UK science and UK finance can work together to help the global economy transition to environmental sustainability. CGFI will help financial institutions shift money away from risky activities that harm the environment, such as coal-fired power and deforestation, and towards activities that are less harmful, such as renewable power and sustainable agriculture. Greening finance for the benefit of everyone everywhere is one of the major contributions the UK can make over the coming decades and its right that these efforts should accelerate rapidly in the year the UK hosts COP26.

Dr Ben Caldecott is Director of the new UK Centre for Greening Finance and Investment (CGFI), seed funded by UK Research and Innovation. He is also the inaugural holder of the Lombard Odier Associate Professorship of Sustainable Finance at the University of Oxford, the first ever endowed professorship of sustainable finance.

Article first appeared on <u>BusinessGreen.com</u> on 15th February 2021.