

Implementing the global agenda on climate change and sustainable development

Grantham Research Institute on Climate Change and the Environment 2019–24



THE LONDON SCHOOL
OF ECONOMICS AND
POLITICAL SCIENCE ■



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Research Institute
on Climate Change
and the Environment

The urgency of action

The next five to 10 years will determine whether or not the world makes a **successful transition to inclusive, sustainable growth**, delivering an improvement in living standards, a reduction in poverty and a better environment for current and future generations. While progress has already been made, particularly over the past decade, the urgency and scale of the challenges we face require an acceleration of action, not only to seize the opportunities of a cleaner and safer form of economic growth, but also to avoid locking in decades of unsustainable and inequitable development.

The **2030 Agenda for Sustainable Development** and the **Paris Agreement** on climate change together offer an opportunity to accelerate the transition, but decision-makers in the public and private sectors need a better understanding of the policies and actions that will realise the ambitious goals that countries have agreed. The Grantham Research Institute on Climate Change and the Environment wants to provide businesses and governments with the research and analysis they need to make better informed decisions about climate action and sustainable development.

About us

The **Grantham Research Institute** on Climate Change and the Environment was established by the London School of Economics and Political Science in 2008 to create a world-leading centre for policy-relevant research and training on climate change and the environment, bringing together international expertise on economics, finance, geography, international relations, development and political economy.

The Institute seeks to embody the founding purpose of the **London School of Economics and Political Science**: to understand the causes of things for the betterment of society. Our programme of research, analysis and engagement seeks to combine academic excellence and policy relevance to provide decision-makers in the public, private and third sectors with authoritative information and expertise.

The **Institute's vision** is a world in which climate change and other environmental challenges are managed effectively to promote inclusive development and prosperity. Accordingly, the purpose of the Institute is:

- to increase knowledge and understanding by performing world-class research on climate change and the environment;



- to promote better informed decision-making about climate change and the environment by engaging with a wide range of audiences around the world; and
- to educate and train new generations of researchers through our teaching programmes.

The activities of the Grantham Research Institute are funded by the **Grantham Foundation for the Protection of the Environment** and a number of other sources, including research grants and donations from philanthropic organisations and private donors. Together with the University of Leeds, the Institute hosts the Centre for Climate Change Economics and Policy, funded by the UK Economic and Social Research Council (ESRC).

“The Institute must continue to produce world class research and policy analysis; it must challenge those who present fake trade-offs between the economy and the environment, or between prosperity and responsibility; and it must help the public and policymakers to distinguish between facts and fictions about climate change. In short, it must do everything it can to ensure that we win the race of our lives.”
Jeremy Grantham CBE



Our priorities 2019–24

We will focus our academic research, policy analysis and engagement activities on key issues and geographies to promote the implementation of the global agenda on climate change and sustainable development.

Our work is guided by the principles of rigour and independence. We base our research findings and views on robust evidence and reasoning, not on ideology. We carry out research and other work without interference from our sponsors and supporters.

Our academic research

Our academic work is grouped into six themes. By studying these themes and the critical linkages between them, we aim to provide a much clearer understanding of how inclusive and sustainable growth can be achieved under different socioeconomic and political conditions.

The first two themes directly explore the ultimate objectives of the global sustainability agenda.



Growth and innovation

We explore the potential for clean growth and the benefits from more sustainable and efficient economies in countries, regions and cities. This includes the role of clean innovation and the dynamic cycle of investment and growth it could unleash. Private sector initiatives are essential here but so too are the enabling environments created by governments and direct investment in critical infrastructure in cities and in the energy and transport sectors. This research includes a programme, led by Nicholas Stern, on the development of a new generation of models that better describe and capture the economics of transformations.



Sustainable development

We explore the practical challenges of implementing the 17 Sustainable Development Goals in an integrated way, and the synergies and trade-offs between them. This includes work on some of the most crucial aspects of delivering the Goals, including climate-resilient development, the nexus between water, food, energy and ecosystem resources, and the links between environment, wellbeing and health. It also includes a programme, led by Nicholas Stern, on a better analytical understanding of the economic and social risks of climate change.



The next two themes focus on the changes needed from economic agents. We are particularly interested in the behaviour of the financial sector, where capital needs to be redirected to more sustainable investment, and of individuals, where changes in consumption behaviour and attitudes to sustainable growth are required.



Finance and investments

Over the coming decades trillions of dollars will be invested into the world's capital stock, and particularly into new infrastructure. How these investment decisions are made will decide and lock in our carbon footprint for the rest of the century. We evaluate how public and private capital flows can be shifted in a sustainable direction, what financial instruments may be needed and the barriers to implementation. The work also assesses the investment behaviours of asset owners and evaluates potential public and private risks, the associated regulatory challenges and potential risk reduction tools, such as insurance.



Changing behaviour

This work explores the pursuit of growth and sustainable development from the point of view of individuals in the public and private sectors – consumers, workers, policy- and decision-makers – taking into account the institutional and political economy conditions under which they operate. It studies what influences behaviours and attitudes to new business and regulatory practices, novel technologies, financial, political and environmental risks. These insights can help identify effective interventions to promote climate-friendly decisions.

The policy challenge of managing change cannot be underestimated. The final two themes explore how environmental policy works in practice. We are evaluating the performance of existing policies and identifying the best ways to design new environmental policies. This offers lessons for the implementation of the global sustainability agenda.



Governance and legislation

This work studies different governance models to implement the Paris Agreement and ratchet up the pledges made in Paris at the international, national and sub-national levels. It explores the actions of multiple actors, including the role of legislators, the interplay between legislation and litigation, and the importance of the private sector and other non-state actors. We plan to extend this analysis to the broader sustainable development regime, considering institutional arrangements to implement the Sustainable Development Goals, given their interrelated nature and the multiple policy and political goals involved.



Policy design and evaluation

Policymakers at the national and sub-national levels are increasingly implementing policies to reduce emissions, ensure climate resilience and protect the environment. We seek to learn lessons from this unprecedented level of policy experimentation and evaluate what actions, taken by whom, using what tools, at what spatial scales, work best in terms of climate and environmental policy outcomes. We use economic and econometric techniques to evaluate the performance (under a range of criteria) of existing policies and to recommend robust policy designs.

Our policy analysis

Our work aims to inform decisions and decision-making. To do so we work constructively with policymakers, private sector actors and civil society in the UK and worldwide. We operate on the principle that effective decisions must be based on sound evidence, solid analytical tools and innovative thinking. Policy advice must not only be timely and targeted but also grounded in a clear understanding of the diversity of socioeconomic, political, institutional and environmental conditions that public and private decision-makers face in the real world.

We recognise that academic research does not always have immediate answers for decision-makers. Therefore we invest time and effort in understanding the needs of public policymakers and businesses, and in exploring how our knowledge and expertise can be used to help them.

We have created a team of policy analysts who work across our six research themes, synthesising and applying results to the key questions that decision-makers have. We seek to make this analysis rigorous, timely and user-focused. In addition, we host, support and provide public access via our website to two important analytical tools:

- The **Climate Laws of the World** database helps decision-makers identify good

practice in climate governance and monitor progress towards the global climate goals. The database contains over 1,500 climate change laws and policies in 197 countries, regions and territories. In collaboration with the Sabin Center for Climate Change Law at Columbia Law School, it has been extended to include data on litigation, tracking the increasingly important role played by courts.

- The **Transition Pathway Initiative** was launched in 2017 with the National Investing Bodies of the Church of England and the Environment Agency Pension Fund to assess how companies are preparing for the transition to a low-carbon economy. It is designed to inform the investment decisions of asset managers and encourage companies to improve their performance in terms of managing not only their greenhouse gas emissions but also the risks and opportunities from the low-carbon transition.

Our engagement

We recognise that our research and expertise will not inform decision-making unless it is communicated effectively. Our team of communications experts support the high-level outreach work of the Institute, particularly of the Chair, Nicholas Stern,

The Institute's Head of Adaptation Research, Dr Swenja Surminski, addresses the UNFCCC climate change conference in Bonn, 2018



The Institute's Chair, Professor Lord Nicholas Stern, speaks at the Global Climate Action Summit in San Francisco, September 2018



and work alongside our researchers to ensure that the needs of decision-makers are understood and fulfilled. This integrated approach to engagement lies at the heart of the Institute's core principles and is vital to our track record of interacting effectively with decision-makers at the highest levels in international institutions and key governments in Europe, Asia and North America.

We will continue our engagement with local, regional and national policymakers in the UK and worldwide. While driven by demand, we seek to engage in particular with the following processes:

- As a UK-based institution we want to support the transition to **clean growth in the UK**. This includes engagement on creating a low-carbon economy, the definition of new ambitions (e.g. a net-zero carbon target) and progress in preparing the UK for climate change.
- Internationally, we want to support the low-carbon agenda in key countries such as **China, India and the United States**. We want to support sustainable development and climate resilience in the world's most vulnerable countries, particularly in Africa and South Asia.

- We want to inform crucial **international processes**. We will work with the secretariat of the United Nations Framework Convention on Climate Change on implementing the Paris Agreement. We will work with multilateral institutions, such as the World Bank, on increasing the flow of sustainable finance.
- We will strengthen our interactions with the private sector, particularly the **finance industry**.

We will also continue our robust efforts to promote **more informed public discussion** and debate, particularly within the broadcast, print and online news media. We will use the best available means to communicate our work, including through our website and extensive social media channels.

Our work is often most impactful when it is conducted in partnership with others, so we will maintain our search for opportunities to collaborate with other universities, research organisations and funders, including our colleagues at the Grantham Institute at Imperial College London and at the ESRC Centre for Climate Change Economics and Policy at the University of Leeds. ●

Support the Grantham Research Institute

Since its inception in 2008, the Grantham Research Institute on Climate Change and the Environment has established a world-leading reputation for research and policy analysis on environmental problems, with a particular emphasis on climate change.

To learn more about joining the charitable foundations, businesses, government agencies and multilateral institutions that have supported the Institute's work since it was founded, please contact Sam Fankhauser, director: s.fankhauser@lse.ac.uk

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