



Online Academic Summer School 2021  
SOAS University of London

## Sustainable Finance and Climate Change Course Handbook

Mode of Attendance: Full-time, Online

Duration: 2 weeks, from 19 July – 30 July 2021

SOAS Accredited: This course is worth 15 UK credits

### Programme Description

This course introduces students to the role of finance in the transition to a sustainable, low-carbon economy. Mitigating and adapting to climate change while simultaneously realising the Sustainable Development Goals (SDGs) requires the deployment of large amounts of capital – capital which isn't currently provided in sufficient amounts. Moreover, climate change poses significant risk to economies and financial systems alike. At the same time, there are substantial opportunities in financing the green transformation and in aligning investments and finance with environmental, social and governance (ESG) criteria.

The course enables students to understand and apply key concepts in climate and sustainable finance, the role of climate and other environmental risks in creating potential financial risks in banking and capital markets, and the role of financial actors in driving a global transition and aligning capital markets with climate and sustainability goals. The course will draw on examples and case studies from various countries of the Global North and South and different thematic areas including green bond markets, the global governance architecture for climate and sustainable finance, long-term sustainability risk assessment, and the role of central banks and financial supervisory authorities. The course will help students build the skills necessary to work and conduct research in a cutting-edge area of finance that is increasingly becoming an important topic for financial institutions and financial authorities around the world.

### Programme Schedule and Topics

Week 1: Financial governance and the low-carbon transition

- Sustainable finance and climate change: key concepts and principles
- Capital markets and the low-carbon transition
- Mobilising bond markets for a low-carbon transition
- The global governance architecture for climate and sustainable finance
- From ambition to action: identifying – and closing – global funding gaps
- Governing sustainable finance: the role of central banks and supervisory authorities

Week 2: Climate risk and financial portfolio management

- TCFD and disclosure of climate risk in investment portfolios
- Climate risk and sustainable finance in vulnerable developing economies
- Quantifying environmental risks in financial markets

- Aligning financial portfolios and companies with sustainability goals
- Optimal financial portfolio construction under the Paris Agreement and the SDGs

### Learning Outcomes

On successful completion of the module, students should be able to:

- Have an in-depth understanding of economic concepts and principles in climate and sustainable finance;
- Understand and explain the gaps in global climate and sustainable finance and propose solutions to meet the funding challenge;
- Explain the role of different actors in climate and sustainable finance, including central banks, financial supervisory authorities, national and multilateral development banks, corporate banks, and institutional investors;
- Understand and analyse the potential risks and opportunities of environmental trends for financial markets, with a particular emphasis on climate risks;
- Explain the range of financial policy instruments and initiatives and their potential with regard to integrating climate change and sustainability into financial policy and supervisory frameworks.

### Assessments

Each course is assessed by two online assessments ('e-tivities'\*) comprising of 30%, the remaining 70% is formed of a 2,500-word essay. The e-tivities provide formative and summative feedback to students as a means of monitoring their progress and encouraging areas in which they can improve. On successful completion of the assessments, students will receive a transcript confirming the credit awarded. Students that do not require credit are strongly encouraged to take part in the e-tivities, but are not required to complete the assessments.

\* An 'e-tivity' is a framework for online, active and interactive learning following a format that states clearly to the students its 'Purpose'; the 'Task' at hand; the contribution or 'Response' type; and the 'Outcome' (Salmon, G. (2002), *E-tivities: The Key to Active Online Learning*, New York and London: Routledge Falmer.)

### Course Convenors

Dr Ulrich Volz, Director of the Centre for Sustainable Finance & Reader in Economics, SOAS.

Dr Harald Heubaum, Deputy Director of the Centre for Sustainable Finance & Lecturer in Global Energy and Climate Policy, SOAS.

Sean Kidney, CEO, Climate Bonds Initiative & Professor of Practice in Sustainable Finance, SOAS.

Dr Jakob Thomä, Managing Director, 2° Investing Initiative & Senior Fellow in Sustainable Finance, SOAS.

Felicia Jackson, Chief Executive, SUFINDA C.I.C.

## Introductory Readings and Sources

- Akenroye, T.O., et al. (2018), "[Towards Implementation of Sustainable Development Goals in Developing Nations: A Useful Funding Framework.](#)" *International Area Studies Review* 21(1), 3-8.
- Bolton, P., et al. (2020), [The Green Swan. Central Banking and Financial Stability in the Age of Climate Change.](#) Basel and Paris: Bank for International Settlements and Banque de France.
- Buhr, B., et al. (2018), [Climate Change and the Cost of Capital in Developing Countries.](#) London and Geneva: Imperial College London; SOAS University of London; UN Environment.
- Dafermos, Y., et al. (2020), [Decarbonising is Easy: Beyond Market Neutrality in the ECB's Corporate QE.](#) London: New Economics Foundation.
- Dikau, S., et al. (2020), [A Toolbox of Sustainable Crisis Response Measures for Central Banks and Supervisors – Second Edition: Lessons from Practice.](#) London: LSE Grantham Research Institute on Climate Change and the Environment and Centre for Sustainable Finance, SOAS University of London.
- Dikau, S., et al. (2021), [Net-zero Central Banking: A New Phase in Greening the Financial System.](#) London: LSE Grantham Research Institute on Climate Change and the Environment and Centre for Sustainable Finance, SOAS University of London.
- Dikau, S. and U. Volz (2019), "[Central Banking, Climate Change and Green Finance.](#)" In: Sachs, J., et al. (eds.), *Springer Handbook of Green Finance: Energy Security and Sustainable Development.* Heidelberg and New York: Springer, pp 81-102.
- Dikau, S. and U. Volz (2021), "[Central Bank Mandates, Sustainability Objectives and the Promotion of Green Finance.](#)" *Ecological Economics* 184, 107022.
- Dupré, S. and H. Chenet (2013), [Connecting the Dots between Climate Goals, Portfolio Allocation and Financial Regulation.](#) Paris: 2° Investing Initiative.
- EU Technical Expert Group on Sustainable Finance (2020), [Taxonomy: Final Report.](#) Brussels: European Commission.
- Frisari, G., et al. (2020), [Climate Risk and Financial Systems of Latin America: Regulatory, Supervisory and Industry Practices in the Region and Beyond.](#) Washington, DC: Interamerican Development Bank.
- Griffin, P.A., et al. (2015), "[Science and the Stock Market: Investor's Recognition of Unburnable Carbon.](#)" *Energy Economics* 52(A), 1-12.
- Hall, N. (2017), "[What is Adaptation to Climate Change? Epistemic Ambiguity in the Climate Finance System.](#)" *International Environmental Agreements: Politics, Law and Economics* 17 (1), 37-53.
- IISD and DRC (2015), [Greening China's Financial System.](#) Winnipeg and Beijing: Institute for Sustainable Development and Development Research Center of the State Council.
- Kidney, S., et al. (2015), [Shifting Private Finance towards Climate-Friendly Investments.](#) Report for the European Commission DG Climate.
- Kling, G., et al. (2021), "[The Impact of Climate Vulnerability on Firms' Cost of Capital and Access to Finance.](#)" *World Development* 137, 105131.

- Macquarie, R., et al. (2020), [Updated View on the Global Landscape of Climate Finance 2019](#). London: Climate Policy Initiative.
- Ma, J., et al. (eds., 2020), [Case Studies of Environmental Risk Analysis Methodologies](#). NGFS Occasional Paper. Paris: Network of Central Banks and Supervisors for Greening the Financial System.
- Mawdsley, E. (2018), [“From Billions to Trillions’: Financing the SDGs in a World ‘Beyond Aid.’”](#) *Dialogues in Human Geography* 8(2), 191-195.
- McGlade, C. and P. Ekins (2015), [“The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2°C.”](#) *Nature* 517, 187-190.
- NGFS (2021), [Adapting Central Bank Operations to a Hotter World. Reviewing Some Options](#). Paris: Network of Central Banks and Supervisors for Greening the Financial System.
- OECD (2017), [Investing in Climate, Investing in Growth. A Synthesis](#). Paris: Organisation for Economic Cooperation and Development.
- Robins, N. and S. Zadek (2016), [The Financial System We Need: From Momentum to Transformation](#). Geneva: UNEP Inquiry into the Design of a Sustainable Financial System.
- Schönauer, A., et al. (2021), [Financial Supervision beyond the Business Cycle. Towards a New Paradigm](#). Berlin and Oxford: 2° Investing Initiative and Oxford Sustainable Finance Programme.
- Semieniuk, G., et al. (2021) [“Low-carbon Transition Risks for Finance.”](#) *WIREs Climate Change* 12(1), e678.
- TCFD (2017), [Recommendations of the Task Force on Climate-related Financial Disclosures](#). Basel: Task Force on Climate-related Financial Disclosures.
- van Toor, J., D. Piljic, G. Schellekens, M. van Oorschot, M. Kok (2020), [Indebted to Nature. Exploring Biodiversity Risks for the Dutch Financial Sector](#). Amsterdam: De Nederlandsche Bank and Netherlands Environmental Assessment Agency.
- Volz, U. (2019) [“Fostering Green Finance for Sustainable Development in Asia.”](#) In: U. Volz et al. (eds.), *Routledge Handbook of Banking and Finance in Asia*. London and New York: Routledge, pp 488-504.
- Volz, U., et al. 2020. [Climate Change and Sovereign Risk](#). London, Tokyo, Singapore, and Berkeley, CA: SOAS University of London, Asian Development Bank Institute, World Wide Fund for Nature Singapore, and Four Twenty Seven.
- Volz, U., et al. (2020), [Inclusive Green Finance: From Concept to Practice](#). Kuala Lumpur and London: Alliance for Financial Inclusion and SOAS, University of London.