

The Macroeconomics of Climate Change

Reading Group: Term 3, 2025

This reading group brings together PhD students and faculty to explore recent research on the macroeconomics of climate change. Through discussions of both theoretical and empirical papers, we aim to deepen our collective understanding of how climate change (and associated policies) shapes macroeconomic outcomes. The readings span recent journal articles and working papers, reflecting the growing scholarly interest in this field. The list is not intended to be exhaustive; participants are encouraged to propose additional papers that complement core themes. Beyond fostering academic dialogue, we hope these conversations will inspire collaborative research ideas among participants.

NEW Rules of Participation

Participants should adhere to the following rules:

- Compulsory for dissertation writers in macroeconomics
- Presentations have a standard seminar format
 - present the paper as if it were your own
 - answer questions about details/big picture/contribution
 - up to 60mins (including questions)
- *All students* are expected to have carefully read the paper

Reading list

Students should email p.sedlacek@unsw.edu to highlight when and which paper they wish to present.

- Acemoglu, Daron, Philippe Aghion, Lint Barrage, and David Hémous (2023). “Climate Change, Directed Innovation, and Energy Transition: The Long-run Consequences of the Shale Gas Revolution”. NBER Working Paper 31657.

- Arkolakis, Costas and Conor Walsh (2023). “Clean Growth”. NBER Working Paper 31615.
- Balboni, Clare, Johannes Boehm, and Mazhar Waseem (2024). “Firm adaptation and production networks: Structural evidence from extreme weather events in Pakistan”. Working Paper.
- Barreca, Alan, Karen Clay, Olivier Deschenes, Michael Greenstone, and Joseph S Shapiro (2016). “Adapting to climate change: The remarkable decline in the US temperature mortality relationship over the twentieth century”. *Journal of Political Economy* 124.1, pp. 105–159.
- Bilal, Adrien and Diego R Känzig (2024). “The Macroeconomic Impact of Climate Change: Global vs. Local Temperature”. NBER Working Paper 32450.
- Bilal, Adrien and Esteban Rossi-Hansberg (2023). “Anticipating climate change across the United States”. NBER Working Paper 31323.
- Burke, Marshall, Mustafa Zahid, Mariana CMMartins, ChristopherW-Callahan, Richard Lee, Tumenkhusel Avirmed, Sam Heft-Neal, Mathew Kiang, Solomon M Hsiang, and David Lobell (2024). “Are We Adapting to Climate Change?”. NBER Working Paper 32985.
- Cai, Yongyang and Thomas S Lontzek (2019). “The social cost of carbon with economic and climate risks”. *Journal of Political Economy* 127.6, pp. 2684–2734.
- Capelle, M Damien, M Diva Kirti, M Nicola Pierri, and M German Villegas Bauer (2023). “Mitigating Climate Change at the Firm Level: Mind the Laggards”. IMF Working Paper.
- Castro-Vincenzi, Juanma, Gaurav Khanna, Nicola Morales, and Nitya Pandalai-Nayar (2024). “Weathering the storm: Supply chains and climate risk”. NBER Working Paper 32218.
- Cruz, José-Luis (2024). “Global warming and labor market reallocation”. Working Paper.

- Cruz, José-Luis and Esteban Rossi-Hansberg (2024). “The economic geography of global warming”. *Review of Economic Studies* 91.2, pp. 899–939.
- Fried (2022). “Seawalls and stilts: A quantitative macro study of climate adaptation”. *The Review of Economic Studies* 89.6, pp. 3303–3344.
- Fried (2024). “A Macro Study of the Unequal Effects of Climate Change”. Federal Reserve Bank of San Francisco Working Paper.
- Hassler, John, Per Krusell, and Conny Olovsson (2021). “Directed technical change as a response to natural resource scarcity”. *Journal of Political Economy* 129.11, pp. 3039–3072.
- Lanteri, Andrea and Adriano A Rampini (2023). “Financing the adoption of clean technology”. Working Paper.
- Nath, Ishan B (2024). “Climate Change, The Food Problem, and the Challenge of Adaptation through Sectoral Reallocation”. Working Paper.
- Shapiro, Alan F and Gilbert E Metcalf (2023). “The macroeconomic effects of a carbon tax to meet the US Paris agreement target: The role of firm creation and technology adoption”. *Journal of Public Economics* 218, p. 104800.
- Zappala, Guglielmo (2024). “Propagation of extreme heat in agriculture across sectors and space”. Working Paper.