TIMOTHY FOREMAN
timforeman.net
timothy.foreman@wu.ac.at
+43 670 550 6508
Citizenship: United States

Academic Positions

Research Scholar, Equity and Justice Research Group,
International Institute for Applied Systems Analysis (IIASA), 7/2023 – present
Assistant Professor (non-tenure track),
Vienna University of Economics and Business (WU), 4/2024 – present
Affiliate Member, Qatar Centre for Global Banking & Finance,
King's College London, 7/2023 – present
Research Associate, Qatar Centre for Global Banking and Finance,
King's College London, 2/2021 – 6/2023
Climate Change Graz Post Doc Fellow, Wegener Center for Climate and Global Change,
University of Graz, 11/2022 – 2/2023
Affiliated Scientist, RFF-CMCC European Institute on Economics and the Environment, 1/2021–1/2023
Postdoc, RFF-CMCC European Institute on Economics and the Environment, Milan, 6/2019–12/2020
Adjunct Professor, IE University, Madrid, 9/2019–5/2021

Graduate Studies

Columbia University
Ph.D. Sustainable Development, 2019
Thesis Title: "Essays on the Economics of Environmental Change"
M.Phil Sustainable Development, 2017
M.A. Sustainable Development, 2017

Undergraduate Studies

BS Applied Mathematics, Columbia University, *Magna cum laude*, 2013

Research and Teaching Fields

Environmental Economics, Climate Finance, Sustainable Development

Teaching Experience

Summer 2025	Climate Economics, WU Vienna, Instructor (co-taught with Armon Rezai)
Spring 2021	Thesis Advisor, International Relations, IE University
Fall 2019	Mathematics for Economists, IE University, Instructor (inaugural year of the Bachelor in Economics)
Spring 2017	Political Development in the Developing World, Columbia University, Teaching fellow for Professor Christopher Sabatini
Fall 2016	Research Methods and Quantitative Techniques in Public Management and Policy, Columbia University, Teaching fellow for Professor Selcuk Eren
Spring 2016	Microeconomics Policy and Analysis, Columbia University, Teaching fellow for Professor Selcuk Eren
Fall 2015	Intermediate Microeconomics, Columbia University, Teaching fellow for Professor Prajit Dutta
Spring 2015	Microeconomics Policy and Analysis, Columbia University, Teaching fellow for Professor Kitty Chan
Fall 2014	Microeconomics Policy and Analysis, Columbia University, Teaching fellow for Professor Suresh Naidu

Professional Activities

Referee	Journal of Environmental Economics and Management; Environment and Development Economics; Management Science; Demography; Atmospheric Environment; PLOS One; Middle East Development Journal; Risk Analysis; Natural Hazards and Earth System Sciences
Presentations	2025: Society for Law and Economics, Florence, Italy; EGU, Vienna, Austria; 2024: European Society for Ecological Economics, Pontevedra, Spain; 2023: Mannheim Conference on Energy and the Environment; 2022: Environmental Protection and Sustainability Forum, Graz, Austria; AERE Summer conference; Mannheim Conference on Energy and the Environment; Sustainable Development Research Symposium, New York, NY; 2021: UCLA Luskin Center for Innovation Climate Adaptation Symposium; LSE and Imperial College Workshop in Environmental Economics; EARE Annual Conference; V Workshop on Migration, Health and Wellbeing; 2020: EAERE Annual Conference; IAERE Conference, Brescia, Italy; 2019: Aarhus University, Department of Economics and Business Economics, Aarhus, Denmark; Sustainable Development Research Symposium, New York, NY; 2018: Wegener Center for Climate and Global Change, Graz, Austria; Austrian Economic Association (NOeG) Winter Workshop, Vienna, Austria; International Conference on Sustainable Development, New York, NY; International Workshop on Sand/Dust Storms and Associated Dustfall, Tenerife, Spain; Eastern Economic Association, Boston, MA
Co-organizer	2024: Naturance Finance Innovation Festival; 2022: QCGBF Annual Conference; King's College CEGF Workshop; King's Climate Finance Workshop; 2021: Climate Finance Panel, International Finance and Banking Society, Oxford University; King's College Climate Energy Governance & Finance Workshop (CEGF); 2016: Interdisciplinary PhD Workshop in Sustainable Development, Columbia University
Panelist	2021: Global Circular Challenge (London School of Economics)

Fellowships & Grants

2022	King's Business School Faculty Innovation Fund Grant (£20,000)
2018 - 2019	Dissertation Fellowship, Columbia University
2013 - 2018	Dean's Fellowship, Columbia University

Publications

"Climate Change, International Migration, and Interstate Conflict," Cattaneo, C. and **Foreman, T.** Ecological Economics. 2023.

"Governance of Sustainable Finance," Chalmers, A.; Klingler-Vidra, R.; Aikman, D; Kuralbayeva, K,; and **Foreman, T.** Journal of Financial Transformation. June 2024.

"The Role of Insurance in Scaling Mass Timber Construction: Review on Enablers and Shortcomings," Irshaid, J.; Linnerooth-Bayer, J.; **Foreman, T.**; Martin, J. Wood & Fire Safety. June 2024.

Working Papers

"*The Effects of Dust Storms on Economic Development*"

Dust storms are a common occurrence for populations residing in semi-arid environments and can result in a variety of immediate and long-term impacts. While previous literature documents many of these short-term effects, such as increases in various respiratory issues (e.g. asthma attacks, suffocation) and increases in traffic accidents (resulting from disrupted transportation networks), this is the first study to use exogenous variation in dust exposure due to long-range transport to study the effects of dust storms on economic activity. I instrument local dust values using dust observed over the Bodélé Depression of

the Sahara Desert, the largest dust source in the world. I show that economic growth in West Africa is reduced by 3% per standard deviation increase in dust exposure over 2 years. Agricultural yields decline in the year of impact on average by 2%. The effects found here could be a contributing factor to reduced economic development in West Africa and suggest that dust storms should be considered an important part of geographic endowments alongside other climate indicators.

"Labor Disutility in a Warmer World: The Impact of Climate Change on the Global Workforce." (R&R at the Journal of Political Economy), with Baker, R., Carleton, T., D'Agostino, A., Delgado, M., Gergel, D., Greenstone, M., Houser, T., Hsiang, S., Hultgren, A., Jina, A., Kopp, R., Malevich, S., McCusker, K., Nath, I., Pecenco, M., Rising, J., Rode, A., Rising, J., and Yuan, J.

This paper develops the first globally comprehensive and empirically grounded estimates of worker disutility due to future temperature increases caused by climate change. Harmonizing daily worker-level data from seven countries representing nearly a third of the world's population, we first evaluate the causal effect of daily temperature on labor supply, recovering an inverted U-shaped relationship where extreme cold and hot temperatures lead to labor supply losses for workers in weather-exposed industries. We then develop the first micro-founded, global estimates for how future climate change will impact workers, accounting for expected shifts in the global workforce towards less weather-exposed industries. Interpreting labor supply impacts of climate change through a simple theoretical framework, we monetize the implied disutility to workers of a warmer climate, a welfare cost not captured in any existing estimates. Under a high emissions scenario, we estimate the increase in labor disutility is valued at roughly 1.8% of global GDP in 2099, with damages being especially large in today's poor and/or hot locations while cold locations benefit. Finally, we estimate that the release of an additional ton of CO2 today will cause expected labor disutility damages of $17.0 under a high emissions scenario and $10.8 under a moderate scenario, using a 2% discount rate that is justified by US Treasury rates over the last two decades. Accounting for uncertainty in these marginal damages when individuals are risk averse increases their value by 31% (high emissions scenario) and 62% (moderate scenario) under a standard parameterization of the utility function.

"*Community Insurance to Support Risk Reduction through Nature-based Solutions*." (R&R at Nature-based Solutions), with JoAnne Linnerooth-Bayer

Nature-based solutions are a key tool to fight both climate change and biodiversity loss. However, their adoption has been slow. Their value is beginning to be recognized by insurance markets, yet current market structures do not provide sufficient incentives for them to be widely adopted. We identify a newly-emerging category of insurance, community insurance, that can help to incentivize and speed the adoption of NbS across a variety of contexts. We show that community insurance has a number of advantages over conventional insurance. We consider different ways it can be implemented and applied to various risks. Finally, we examine difficulties it may face and its prospects within the EU insurance framework.

"*The Effect of Dust Storms on Child Mortality*" CDEP-CGEG Working Paper.

"Environmental Shocks and the Decision to Migrate."

Other Published Works

McQuaid, S., Zandersen, M., Brophy, M., Rizzi, D. et al., *Policy imperatives for a competitive and resilient nature-positive economy*, European Commission: Directorate-General for Research and Innovation, Publications Office of the European Union, 2025, https://data.europa.eu/doi/10.2777/8109329 (contributing author, Chapter 3)

Linnerooth-Bayer, J., Martin, J., Irshaid, J., **Foreman, T**., and de Wolf, L. 2023. "Governance/policy enablers/barriers for scaling NbS" Naturance Deliverable.

Sachs, J., Rising, J., **Foreman, T.**, Simmons, J., and Brahm, M. 2015. "The Impacts of Climate Change on Coffee: Trouble Brewing" https://eicoffee.existencia.org/

Raymond, C., **Foreman, T.**, King, A., Kornhuber, K., Lesk, C., Mora, C., Perkins-Kirkpatrick, S., Russo, S., and Vijverberg, S. 2018. "Projections and hazards of future extreme heat." In *Planning for Climate Change Hazards*. Oxford University Press.
https://dx.doi.org/10.1093/oxfordhb/9780190455811.013.59

Work in Progress

Foreman, T., Varela, A, and Wong, J. "Inland Flooding: Estimating Damages and Protection from Insurance"

Aikman, D., **Foreman, T.,** Lifschitz, Y., and Nilsson, M. "Quantifying the Potential Impact of Firms' Climate Liability."

Aikman, D., Chalmers, A., **Foreman, T.**, Klingler-Vidra, R., and Kuralbayeva, K. "Sustainable Finance: what is it, and how is it regulated?" (see coverage at Global Policy)

Foreman, T. "Predicting Areas of Agricultural Expansion."

Languages

English (native)
German (advanced - C1)
French (basic - A2)
Spanish (basic – A1)

References

David Aikman
King's College London
david.aikman@kcl.ac.uk
+44-20-7836-5454

Cristina Cattaneo
RFF-CMCC EIEE
cristina.cattaneo@eiee.org
+39-342-613-3782

Wolfram Schlenker
Harvard University
wolfram_schlenker@hks.harvard.edu
+1-617-384-1047

January 2026