Lint Barrage

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Academic Positions:

07/2022 – present: Associate Professor & Chair of Energy and Climate Economics, ETH Zurich

2019 – 06/2022: Assistant Professor of Economics, U.C. Santa Barbara

2018 – 2019: Visiting Assistant Professor, Energy Policy Institute at the University of Chicago

2015 - 2019: Assistant Professor of Economics and Environmental Studies, Brown University,

Department of Economics & Institute at Brown for Environment and Society

2013 – 2015: Assistant Professor, University of Maryland, College Park, Department of Agricultural and Resource Economics

Education:

Ph.D. Economics (with Distinction), Yale University, May 2013

M. Phil. Economics, Yale University, December 2011

M.A. Economics, Yale University, May 2010

B.A. Economics / Environmental Studies (both Honors), University of Chicago, 2007

Affiliations and Editorial Positions:

Co-Editor, *Journal of Political Economy – Microeconomics*, 2022 – present

Member, World Economic Forum Global Future Council on Equitable Transition, 2025 - present
Research Affiliate, Centre for Economic Policy Research, Macro and Growth, 2020 – present
Affiliate, CESifo Research Network, Energy and Climate Economics, 2016 – present *Journal of the Assoc. of Environmental and Resource Economics*, Editorial Council, 2021 – 2023
Faculty Research Fellow, National Bureau of Economic Research, 2016 – 2022

Publications and Scholarly Activities:

Books:

Barrage, Lint, and Solomon Hsiang (Eds.) (2024). *Handbook of the Economics of Climate Change*. Elsevier.

Published and Accepted Papers:

Bakkensen, Laura, and Lint Barrage (2025) "Climate Shocks, Cyclones, and Economic Growth: Bridging the Micro-Macro Gap" *The Economic Journal*, doi: ueaf050

Barrage, Lint (2025). "Climate Change Impacts on Public Finances Around the World" Annual Review of Resource Economics, Vol. 17, https://doi.org/10.1146/annurev-resource-011624-035902

Barrage, Lint, and William D. Nordhaus (2024). "Policies, Projections, and the Social Cost of Carbon: Results from the DICE-2023 Model" Proceedings of the National Academy of Sciences, 121 (13) e2312030121.

Hsiang, S., S. Greenhill, J. Martinich, M. Grasso, R.M. Schuster, L. Barrage, D.B. Diaz, H. Hong, C. Kousky, T. Phan, M.C. Sarofim, W. Schlenker, B. Simon, and S.E. Sneeringer (2023): Ch. 19. Economics. In: Fifth National Climate Assessment. Crimmins, A.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, B.C. Stewart, and T.K. Maycock, Eds. U.S. Global Change Research Program, Washington, DC, USA.

Bakkensen, Laura, and Lint Barrage (2021) "Going Under Water? Flood Risk Belief Heterogeneity and Coastal Home Price Dynamics" The Review of Financial Studies, hhab122, November 2021. Featured in the NBER Digest (2017), Pacific Standard (2018), Providence Journal (2019), VICE News (2019)

Barrage, Lint (2020) "The Fiscal Costs of Climate Change" AEA Papers and Proceedings 2020, 110: 107–112.

Barrage, Lint (2019) "The Nobel Memorial Prize for William D. Nordhaus" (Commissioned), *The Scandinavian Journal of Economics*, 121(3): 884-924.

Barrage, Lint (2020) "Optimal Dynamic Carbon Taxes in a Climate-Economy Model with Distortionary Fiscal Policy" Review of Economic Studies, 87(1): 1-39.

Barrage, Lint, Eric Chyn, and Justine Hastings (2020) "<u>Advertising and Environmental</u> <u>Stewardship: Evidence from the BP Oil Spill</u>" *American Economic Journal: Policy*, 12(1): 33-61. *Featured in AEA Research Highlights (2020)*, <u>Harvard Business Review</u> (2014)

Barrage, Lint, and Jacob Furst (2019) "Housing Investment, Sea Level Rise, and Climate Change Beliefs" *Economics Letters*, 177: 105-108.

Barrage, Lint (2018) "Be Careful What You Calibrate For: Social Discounting in General Equilibrium" *Journal of Public Economics*, 160C: 33-49.

M. Burke, M. Craxton, C.D. Kolstad, C. Onda, H. Allcott, E. Baker, L. Barrage, R. Carson, K. Gillingham, J. Graff-Zivin, M. Greenstone, S. Hallegatte, W.M.Hanemann, G. Heal, S. Hsiang, B. Jones, D.L. Kelly, R. Kopp, M. Kotchen, R. Mendelsohn, K. Meng, G. Metcalf, J. Moreno-Cruz, R. Pindyck, S. Rose, I. Rudik, J. Stock and R. Tol (2016) "Opportunities for Advances in Climate Change Economics" Science, 15 Apr 2016: 352(6283): 292-293.

Barrage, Lint (2014) "Sensitivity Analysis for Golosov, Hassler, Krusell, and Tsyvinski (2014): 'Optimal Taxes on Fossil Fuel in General Equilibrium'" Supplemental Material, Econometrica, 82(1): 41-88. [Supplementary Material to: Golosov, Mikhail, John Hassler, Per Krusell, and Aleh Tsyvinski (2014) "Optimal Taxes on Fossil Fuel in General Equilibrium," Econometrica, 82(1): 41-88.]

Barrage, Lint and Min Sok Lee (2010): "A Penny for Your Thoughts: Inducing Truth-Telling in Stated Preference Elicitation" *Economics Letters*, 16: 140-142.

Working Papers:

Aghion, Philippe, Lint Barrage, Eric Donald, David Hémous, Ernest Liu (2025) "<u>Transitions to Green Technology along the Supply Chain</u>" *NBER WP 33934*.

Aldeco, Lorenzo, Lint Barrage, and Matthew Turner (2025) "Equilibrium Particulate Exposure" *NBER WP 34081*.

Barrage, Lint (2024) "The Fiscal Costs of Climate Change in the United States" CER-ETH WP 23/380. Online Appendix. [R&R, The Review of Economic Studies.]

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 WP 31657. [R&R, The Review of Economic Studies]

Jeon, Woongchan, Lint Barrage, and Kieran Walsh (2024) "<u>Pricing Climate Risks: Evidence from Wildfires and Municipal Bonds</u>" *CESifo WP* 11447. [R&R, *Journal of Public Economics*] See also: <u>CEPE Policy Brief</u>

Permanent Working Papers:

Barrage, Lint (2018) "Regulatory Dynamics in U.S. Aviation Safety: Economic Determinants of FAA Behavior"

Works in Progress:

Barrage, Lint, Hans Gersbach, and Kieran Walsh (2024) "Production Networks, Weather Shocks, and the Global Costs of Climate Change"

Barrage, Lint, and Gustav Fredriksson (2023) "In the Heat of the Moment: Carbon Pricing Support in a National Referendum"

Book Chapters:

Acemoglu, Daron, Philippe Aghion, Lint Barrage, and David Hemous (2024) "Green Innovation and the Transition Toward a Clean Economy" in: "The Green Frontier: Assessing the Economic Implications of Climate Action," eds. Jean Pisani-Ferry and Adam Posen, Peterson Institute for International Economics.

Barrage, Lint (2021) "Climate Policy Opportunities for the United States" in: "No Brainers and Low-Hanging Fruit in National Climate Policy," eds. Francesco Caselli, Alexander Ludwig, and Rick van der Ploeg, CEPR e-Book.

Barrage, Lint (2017) "Carbon Pricing Policy Design and Revenue Management: Economic Models and Policy Practice" in: "Building a Climate Resilient Economy and Society," eds. K.N. Ninan and Makoto Inoue, Edward Elgar Publishers, Cheltenham, UK.

Grants:

Alfred P. Sloan Foundation, "Energy, Trade, and Macroeconomics," w. Joe Shapiro, 2024-27 International Growth Center Research Grant "Air Pollution Exposure in Spatial Equilibrium," with Matthew Turner, 2018

UTRA Award "Climate Risks and U.S. Housing Markets," with Jacob Furst, 2018 International Growth Center Research Grant "Determinants of Global Air Pollution Exposure," with Matthew Turner, 2017

IBES Project Development Grant: "Improving Transparency in Environmental Compliance," with Justine Hastings, 2015

Invited Talks and Conference Presentations:

2025: Swiss Academy of Sciences Global Change Day (Keynote), European Central Bank,

Toulouse School of Economics, HEC Lausanne; *scheduled:* Université Paris-Dauhpine, 4th Conference in Sustainable Finance University of Luxembourg (Keynote), NBER Macro Public SI (discussant), IMF, Paris School of Economics

2024: CEPR – FGN-HSG Workshop on Sustainability and Public Policy (Keynote), Oxford University, U.S. Environmental Protection Agency, University of Mannheim, UZH Climate Conference, European Commission Workshop on Managing the Green Transition; *scheduled*: Tinbergen Institute, University of Oslo, Banca d'Italia, University of Bologna

2023: Kiel U., U. of Alabama, London School of Economics, Mannheim Conference on Energy and the Environment (Keynote), World Bank Annual Urbanization and Poverty Reduction Conference (mini-Keynote), ETH Risk Center, Royal Society Economics Conference, University of Zurich, Bern Energy and Environmental Economics Workshop, U. Leipzig, St. Gallen U., ESCB Research Cluster on Climate Change Workshop (Keynote), Geneva Graduate Institute

2022: ASSA Annual Meeting (disc.), European Commission, U.S. Treasury, University of Oxford, Arizona State University, Workshop on "Macroeconomic and climate governance" University of Bologna, Santa Fe Institute, New York Federal Reserve

2021: ASSA Annual Meeting, Stanford University, CEPR Climate Economics Workshop, Colorado State University, University of Cambridge (Climate Workshop), Federal Reserve Board of Governors, Congressional Budget Office, *ifo* Seminar, WEIA Annual Conference, Deutsche Bundesbank; Texas A&M, U.C. Berkeley (Economics), Banca d'Italia – Bank of England Climate Conference, Universidad Diego Portales, Duke University, Brazilian Econometric Society

2020: ASSA Annual Meeting, Federal Reserve Bank of San Francisco Virtual Seminar on Climate Economics; U.S. Congressional Budget Office, Federal Reserve Bank of Richmond; ETH Zurich CEPE Seminar; World Bank / IMF Joint Seminar on Climate Macroeconomics, Climate Impacts Lab – Federal Reserve Bank of San Francisco Conference on "Economic Risks of Climate Change - Implications for Financial Regulators"

2019: ASSA Annual Meeting (disc.), University of Chicago Harris School, Cornell University, University of Maryland AREC, Forum on Scenarios for Climate and Societal Futures (University of Denver), Tilburg University, University of Arizona, AURÖ Jahrestagung, NBER EEE Spring Meeting (disc.), Northeast Workshop on Energy Policy and Environmental Economics (disc.), Society for Economic Dynamics; NBER Summer Institute (EEE), University of Southern California; U.C. Berkeley Agricultural and Resource Economics

2018: ASSA Annual Meeting (disc.), SURED (Keynote Address), Society for Economic Dynamics, U.C. Berkeley Climate Economics Workshop, Federal Reserve Board of Governors, University of Connecticut, University of Zurich, University of Chicago EPIC, Yale University School of the Environment, University of Virginia Darden School of Business, U.C. Santa Barbara

2017: ASSA Annual Meeting (disc.), IMF Workshop on Macroeconomic Policy and Income, Mercator Research Institute, IIES Stockholm, Universität Basel, ETH Zurich, IPAG Workshop (Keynote), Stanford SEEPAC Workshop, U.C. Santa Barbara LAEF Climate Economics Workshop, NBER Summer Institute (EEE), Stanford SEEPAC Lunch, University of Colorado Boulder; U.C. Davis, Georgetown, University of Maryland AREC, U.C. San Diego

2016: Columbia University Business School, Yale University School of the Environment, Columbia University SIPA, Colby College, U.C. Berkeley, 20th International Conference on Macroeconomic Analysis and International Finance, Association of Environmental and Resource Economists Summer Meeting, Conference on Sustainable Resource Use and Economic Dynamics, Econometric Society Asia Meetings, NBER Summer Institute (EEE), University of Rhode Island, Arizona State, CESifo Conference on Energy and Climate Economics

2015: London School of Economics Grantham Institute, Iowa State University, U.S. Environmental Protection Agency, George Washington U., ICMAIF, Association of Environmental and Resource Economists Summer Meeting, PERC Workshop on Market Adaptation to Climate Change

2014: University of Calgary, Resources for the Future, 18th International Conference on Macroeconomic Analysis and International Finance, University of Minnesota Heller-Hurwicz Economics Institute Conference on 'Developing the Next Generation of Economic Models of Climate Change', ETH Zurich, Graduate Institute Geneva

2013: Northwestern University Kellogg School of Management, Toulouse School of Economics, University of Maryland AREC, University of British Columbia, Arizona State University, Sciences Po, University of Bern, Institute for International Economic Studies, 20th Annual Conference of the European Association of Environmental and Resource Economists (EAERE) Toulouse, University of Alberta School of Business

2006-2012: Oxford OxCarre, Cowles Foundation Conference on Macroeconomics and Climate Change, Northeast Workshop on Energy Policy and Environmental Economics, ASSA Annual Meeting 2011 (disc.), EAERE 2008, International Workshop on Legal Issues for Clean Energy and Climate Change, Tsinghua University, Beijing

Fellowships, Honors and Awards:

European Award for Researchers in Environmental Economics under the Age of Forty, European Association of Environmental and Resource Economists (2023) ETH Golden Owl (teaching award, 2023)

Brown University Wriston Fellowship ('excellence in teaching and scholarship') (2017-18), George Trimis Dissertation Prize (2013) Yale University Cowles Foundation Fellowship, (2008 –2012), Student Marshal, University of Chicago (2006), Phi Beta Kappa (2006)

Refereeing:

American Economic Review, Review of Economic Studies, Journal of Political Economy, Quarterly Journal of Economics, Econometrica, Review of Economic Dynamics, Journal of Economic Theory, American Economic Journal: Macroeconomics, American Economic Journal: Policy, American Economic Journal: Applied, Macroeconomic Dynamics, Economic Journal, Journal of Public Economics, Journal of Environmental Economics and Management, International Journal of Industrial Organization, Environmental and Resource Economics, Journal of Economic Growth, Journal of Economics & Management Strategy, Economic Inquiry, Journal of Economic Dynamics and Control, Journal of Urban Economics, International Economic Review, Energy Economics, Journal of Economic Behavior and Organization, Journal of Development Economics, Climatic Change, AER Insights, Journal of Money, Credit, and Banking, Proceedings of the National Academy of Sciences, European Economic Review, Review of Environmental Economics and Policy

Teaching:

Ph.D. Level:

- Environmental Macroeconomics UCSB: Winter 2021, Fall 2021; ETH Spring 2024, 2025
- Special Research Topics in Environmental Economics UCSB: Fall 2020 2022
- Climate Change Economics American Economic Association, Continuing Ed.: Jan. 2020
- Berkeley Summer School in Environmental and Energy Economics, August 2018
- "General Equilibrium" section of Microeconomic Applications in Agricultural and Resource Markets U. Maryland, Spring 2015
- Environmental Taxation and Regulation U. Maryland, Spring 2014 *Executive MBA Level:*
- Energy Management, Technology & Economics ETH-USG embaX, 2024, 2025 *Masters Level:*
- Sustainability Economics ETH Zurich, Spring 2025
- Climate Economics and Finance ETH Zurich, Spring 2023, 2024
- Integrated Environment-Energy-Economy Modelling, Spring 2024

Undergraduate Level:

- Principles of Macroeconomics UCSB: Spring 2021, Fall 2021, Spring 2022
- Environmental Economics and Policy Brown U.: Fall 2015, 2016, Spring 2018
- Intermediate Microeconomics Brown U.: Fall 2016, Spring 2018
- Econometric Applications in Ag. and Natural Resource Econ. U. Maryland: Fall 2014
- Intermediate Applied Microeconomics U. Maryland: Fall 2014

Ph.D. Advising (Dissertation Committee Member unless otherwise noted):

Gerrit Pecksen (2025 – present, Chair); Selina Schön (2023 – present, Chair); Lukas Balzer (2022 – present, Chair); Gustav Fredericksson (2022 – 2025); Woongchan Jeon (2019 – 2023); Gregory Casey (2016 – 2018); Christy (Yichen) Zhou (Spring 2014-2016); Davide Cerruti (Spring 2014-2016); Michael H. Taylor (2014); Casey Wichman (2014-2015)

Professional Service and Activities:

Policy and Public Engagement:

Speaker, Aerztinnen und Aerzte fuer Umweltschutz (AefU) Tagung, May 2025

Speaker, Thai Green Parliament Delegation Visit to ETH Zurich, May 2025

Panelist Speaker, Swiss Network of Public Economics Workshop, KOF, February 2025

Panelist Speaker, OECD High-Level Policy Forum, February 2025

Panelist Speaker, Forum on the Macroeconomics of Green and Resilient Transitions, cohosted by Coalition of Finance Ministers for Climate Action & Bezos Earth Fund, 2024

Author, 5th U.S. National Climate Assessment, Economics Chapter, 2021 – 2023

Panelist Speaker, CUREMhorizonte 2023: Can Less Be More? June 2023

Panelist Speaker, G20 International Conference on Climate Change, "Policy Panel on Global Coordination and Policies for Emerging and Advanced Countries," July 2021

Panelist Speaker and organizing committee member of "America's Climate Change Future" workshop with U.S. Senator Sheldon Whitehouse and Brown University, Providence, RI, February 2019

Panelist Speaker representing RIIPL to U.S. Commission on Evidence-Based Policy, Second Public Hearing, Chicago, IL, January 5, 2017

Panelist Speaker: "Opportunities in Sustainable Investing", Brown Financial Symposium, New York City, NY, April 2016

Climate Science Day 2014: Served as delegate on multi-disciplinary teams meeting with U.S. congressional offices and committee staff. Organizing host: Council on Food, Agricultural, and Resource Economics (C-FARE). January 2014

Independent Consultant to U.S. National Research Council "Committee on the Effects of Provisions in the Internal Revenue Code on Greenhouse Gas Emissions" 2011-2012 *Academic*:

Co-Lead, European Economic Association Congress Scientific Committee, "Environmental Economics," 2025

Co-Organizer, National Bureau of Economic Research Conference on "The Economics of Decarbonizing Industrial Production", September 2023, September 2025

Co-Organizer, National Bureau of Economic Research EEE Spring Meetings, 2022

Interviews and Media Mentions:

Tele Z Konkret: Konkret mit Lint Barrage, TeleZ, 01/2025

Ökonomin Lint Barrage über Feuer in Los Angeles und Klimawandel, by Simon Schmid, *Tagesanzeiger*, 01/2025

UCLA Anderson Forecast, "Macroeconomic Impacts of Climate Change," Webcast, 07/2024

More Debt is Better than More Billion-Dollar Climate Disasters, Mark Gongloff, Bloomberg, 06/2024

Financial Risks of Climate Change, Webcast, UBS Center, 05/2023

Growth from Failure, Podcast, Yinh Hinh, 03/2022

Beyond Reproach – Can An Advertising Campaign Act as a Kind of Corporate Insurance in a Disaster? *AEA Research Highlights*, 04/2020

Tool projects flood-damage risks to coastal homes, The Providence Journal, 03/2020

The Housing Market Is Fueling Our Collective Climate Denial, VICE News, 11/2019

Sea-level rise is eroding coastal property values, speaker says at Providence conference, *The Providence Journal*, 10/2019

Could climate change spark the next financial crisis? Economists Lint Barrage and Armon Rezai warn about the financial consequences of climate action and inaction, Financial Times Alphachat, 02/2019

Risk of sea level rise 'hasn't hit home' for coastal R.I. property owners, experts say, The Providence Journal, 02/2019

Sheldon Whitehouse featured at America's Climate Change Future mini conference at Brown University, UPRISE RI, 02/2019

If Americans Keep Ignoring Flood Risk, We Could Face a Housing-Market Crash, Pacific Standard, 05/2018

Brown University Professor Discusses Local Impacts Of Offshore Drilling, Rhode Island Public Radio, 01/2018

Shore Dwellers Perceive Less Risk from Flooding, NBER Digest, 12/2017

Study: Green Advertising Helped BP Recover from the Deepwater Horizon Spill, Harvard Business Review, 02/2014

Blogs:

Q&A with Lint Barrage about Climate Change, Flood Risk, and the Housing Market, UVA Darden Global Water Blog, UVA Darden Global Water Blog, 03/2019

Lint Barrage on climate change and capital taxation, Marginal Revolution, 02/2019