Frank C. Errickson

Center for Policy Research on Energy and the Environment
School of Public and International Affairs
Princeton University

Phone: +1 732-691-2742
Email: fce@princeton.edu
Website: frankerrickson.github.io

Academic positions

Postdoctoral Research Associate, Center for Policy Research on Energy and the Environment at the School of Public and International Affairs, Princeton University, 2020-present

Education

Ph.D. Energy and Resources, University of California, Berkeley, 2020
Committee: David Anthoff (*chair*), Klaus Keller, & William D. Collins
Dissertation: *Uncertainty, Inequality, and Global Climate Policy*

M.S. Energy and Resources, University of California, Berkeley, 2016

M.A. Climate and Society, Columbia University, 2011

B.A. Political Science, *summa cum laude*, Stockton University, 2009
Minor in Environmental Science, *Sustainability & Environmental Policy Certificate*

Affiliations

Affiliate Member, Resources for the Future Social Cost of Carbon Initiative, 2021-present
Associate Member, Climate Futures Initiative, Princeton University, 2018-present
Doctoral Fellow, Society, Environemnt, and Economics Lab, UC Berkeley, 2014-2020
Doctoral Member, The Network for Sustainable Climate Risk Management, 2016-2020

Peer-reviewed publications

* *indicates publications where I am a co-lead author with equal contribution*

1. Budolfson, M.B., Dennig, F., **Errickson, F.C.***, Feindt, S., Ferranna, M., Fleurbaey, M., Klenert, D., Kornek, U., Kuruc, K., Méjean, A., Peng, W., Scovronick, N., Spears, D., Wagner, F., and Zuber, S. "Climate policy: protecting the poor with a carbon tax and equal per capita dividend." Forthcoming in *Nature Climate Change* (invited Policy Brief).

2. Budolfson, M.B., Dennig, F., **Errickson, F.C.***, Feindt, S., Ferranna, M., Fleurbaey, M., Klenert, D., Kornek, U., Kuruc, K., Méjean, A., Peng, W., Scovronick, N., Spears, D., Wagner, F., and Zuber, S. "Climate action with revenue recycling has benefits for poverty, inequality, and wellbeing." Forthcoming in *Nature Climate Change*.

3. Rennert, K., Prest, B.C., Pizer, W.A., Newell, R.G., Anthoff, D., Kingdon, C., Rennels, L., Cooked, R., Raftery, A.E., Ševčíková, H., **Errickson, F.C**. "The social cost of carbon: ad-

vances in long-term probabilistic projections of population, gdp, emissions, and discount rates." Forthcoming in *Brookings Papers on Economic Activity*. Working paper version.

4. **Errickson, F.C.**, Keller, K., Collins, W.D., Srikrishnan, V., and Anthoff, D. (2021). "Equity is more important for the social cost of methane than climate uncertainty." *Nature* 592, 564-570. doi:10.1038/s41586-021-03386-6

5. Budolfson, M.B., Anthoff, D., Dennig, F., **Errickson, F.C.***, Kuruc, K., Spears, D., and Dubash, N.K. (2021). "Utilitarian benchmarks for emissions and pledges promote equity, climate, and development." *Nature Climate Change* 11, 827–833. doi:10.1038/s41558-021-01130-6

6. Scovronick, N., Anthoff, D., Dennig, F., **Errickson, F.C.***, Ferranna, M., Peng, W., Spears, D., Wagner, F., and Budolfson, M.B. (2021). "The importance of health co-benefits under different climate policy cooperation frameworks." *Environmental Research Letters* 16(5) 055027. doi:10.1088/1748-9326/abf2e7

7. **Errickson, F.C.**, Kuruc, K., and McFadden, J. (2021). "Animal-based foods have high social and climate costs." *Nature Food* 2, 274-281. doi:10.1038/s43016-021-00265-1

8. Scovronick, N., Vasquez, V.N., **Errickson, F.C.**, Dennig, F., Gasparrini, A., Hajat, S., Spears, D., Budolfson, M.B. (2019). "Human health and the social cost of carbon: a primer and call to action." *Epidemiology* 30(5), 642-647. doi:10.1097/EDE.0000000000001057

9. Scovronick, N., Budolfson, M.B., Dennig, F., **Errickson, F.C.***, Fleurbaey, M., Peng, W., Socolow, R.H., Spears, D., Wagner, F. (2019). "The impact of human health co-benefits on evaluations of global climate policy." *Nature Communications* 10, 2095. doi:10.1038/s41467-019-09499-x

Working papers

1. **Errickson, F.C.**, Wong, T.E., Keller, K., Rennels, L., and Anthoff, D. "Improved climate modeling reduces extreme social cost of carbon estimates." Revisions requested at *Nature Climate Change*.

2. Wong, T.E., Ledna, C., Sheets, H., Rennels, L., **Errickson, F.C.**, Diaz, D., Anthoff, D. "Uncertainty in future sea level raises high-end coastal adaptation costs." Under review (first round) at *Earth's Future*.

3. Colbert, K.R., **Errickson, F.C.**, Anthoff, D., and Forest, C.E. "Including climate system feedbacks in calculations of the social cost of methane." Draft available.

4. Budolfson, M.B., Dennig, F., **Errickson, F.C.**, Fleurbaey, M., Peng, W., Scovronick, N., and Wagner, F. "Are imporvements in air quality a sufficient justification for climate policy?" Draft available.

Research in progress

1. *Tradeoffs between coastal risk management and equity along the east coast of the United States*, with Klaus Keller and Michael Oppenheimer.

2. *Climate adaptation, rural-urban migration, and decision-making under uncertainty among smallholder farmers in Nepal*, with Nicolas Choquette-Levy, Klaus Keller, and Michael Oppenheimer.

3. *Accounting for multiple sources of climate uncertainty in the social cost of nitrous oxide*, with David Anthoff, Anaya Hall, and Klaus Keller.

4. *Sea-level rise impacts and vulnerable communities in a Paris compliant world*, with David Anthoff, Klaus Keller, and Tony E. Wong.

5. *Historic warming influences future economic projection uncertainty*, with David Anthoff, Klaus Keller, Vivek Srikrishnan, and Tony E. Wong.

6. *MimiBRICK: an open-source physical-statistical model framework for global and regional mean sea-level rise*, with David Anthoff, Klaus Keller, Lisa Rennels, Vivek Srikrishnan, and Tony E. Wong.

Presentations

1. "The Social Cost of Carbon: Advances in Long-Term Probabilistic Projections of Population, GDP, Emissions, and Discount Rates" 2021. Virtual presentation, *Fall 2021 Brookings Papers on Economic Activity conference.* Washington, DC (participant in author discussion session).

2. "Progressive Revenue Recycling can Alleviate Poverty, Reduce Inequality, and Improve Wellbeing While Avoiding Dangerous Climate Change," 2021. Virtual presentation, *Climate Futures Workshop: Climate Solutions, Money, and Politics.* Princeton University, Princeton, NJ.

3. "Accounting for Deeply Uncertain Temperature and Sea-Level Projections in the Social Cost of Carbon," 2019. Oral presentation, *Workshop on Climate Policy and Sustainable Growth.* Princeton University, Princeton, NJ.

4. "Climate Uncertainties and the Social Cost of Methane," 2018. Poster presentation, *Sustainability Research Network Awardees Conference.* National Science Foundation, Washington, DC.

5. "The Network for Sustainable Climate Risk Management (SCRiM): An Overview," 2018. Oral presentation, *Sustainability Research Network Awardees Conference.* National Science Foundation, Washington, DC (jointly presented with Klaus Keller, Ben Lee, Robert Nicholas, and Nancy Tuana).

6. "The Impact of Human Health Co-Benefits on Evaluations of Global Climate Policy," 2018. Oral presentation, *European Association of Environmental and Resource Economists Summer School on Climate Change Assessment: Economic Models and Evaluation Criteria.* Fondazione Eni Enrico Mattei, Venice, Italy.

7. "Accounting for Climate Uncertainty," 2017. Oral presentation, *Data Science for the 21st Century (DS421) Seminar.* UC Berkeley, Berkeley, CA.

8. "A Modular Approach to Integrated Assessment Modeling," 2017. Oral presentation, Fondation Maison des Sciences de l'Homme, Paris, France.

9. "Uncertainty and the Social Cost of Methane Using Bayesian Constrained Climate Models," 2016. Poster presentation, *American Geophysical Union (AGU) Fall Meeting.* San Francisco, CA.

Honors and awards

Loker Foundation Graduate Award, UC Berkeley College of Natural Resources (2019).

Data Sciences for the 21st Century (DS421) NSF Fellow: UC Berkeley (2016-2018).

Outstanding Graduate Student Instructor Award, Haas School of Business, UC Berkeley (Fall 2015).

Graduate School of Arts and Sciences academic scholarship, Columbia University (2010-2011).

Undergraduate: Outstanding Scholars Recruitment Program Scholarship (2005-2009), Edward J. Bloustein Distinguished Scholars Scholarship (2005-2009), Dean's List (2005-2009).

Teaching

Graduate student instructor, *The Economics of Climate Change.* Energy and Resources Group, UC Berkeley. (Fall 2015, 2018, 2019 and Spring 2016).

Graduate student instructor, *Microeconomics for Business Decision Making.* Haas School of Business, UC Berkeley. (Fall 2016). Received Outstanding Graduate Student Instructor award.

Workshops and summer schools attended

European Association of Environmental and Resource Economists Summer School on Climate Change Assessment: Economic Models and Evaluation Criteria. Fondazione Eni Enrico Mattei, Venice, Italy (2018).

DS421 Data Visualization and Science Communication Workshop. UC Berkeley, Berkeley, CA (2017).

Interdisciplinary PhD Workshop in Sustainable Development. Columbia University, New York, NY (2017).

SCRiM Summer School on Sustainable Climate Risk Management. Pennsylvania State University, State College, PA (2016).

Summer Workshop in Climate Change Economics - Empirics of Climate Impacts. UC Berkeley, Berkeley, CA (2015).

Academic service

Organized workshops & conferences

Furthering Environmental Justice Perspectives in Our Research (co-organizer, virtual workshop). Princeton University, Princeton, NJ (2021).

Global Perspectives on Sustainable and Just Energy Transitions (co-chair, oral and poster session). American Geophysical Union Fall Meeting. San Francisco, CA (2019).

Other

Volunteer subject matter expert, *The Jersey City Public Schools Sustainability Science, Technology, Engineering, Arts, and Mathematics (STEAM) Challenge - Environmental Ambassadors* (2021).

Student organizer, UC Berkeley Climate Change Economics Lunch Seminar (2017-2019)

Committee member, Energy and Resources Group graduate student admissions committee, UC Berkeley (two admission cycles).

Reviewer

Climatic Change, Nature Climate Change, WIREs Climate Change

Other experience and skills

Consultant, Resources for the Future & US Environmental Protection Agency (2021-present). *Providing technical assistance to implement President Biden's Executive Order 13990, which instructed a newly formed interagency working group to provide revised social cost of carbon estimates by January 2022*

Volunteer Researcher, Clinton Health Access Initiative, Applied Analytics Team (2013-2014). Project: *Alternative Energy and Increased Healthcare Access in Sub-Saharan Africa*

Research Assistant, Columbia Water Center, Earth Institute at Columbia University (2013). Project: *Climate-Informed Global Flood Risk Assessment*

Junior Research Associate, The Nature Conservancy (2011-2012).
Project: *Ecosystem Based Approaches to Climate Adaptation Policy and Resiliency*

Research Assistant, School of International & Public Affairs, Columbia University (2010-2011).
Project: *Climate Change, Glacial Loss, and Himalayan Communities*

Computing: Julia, Python, R, Fortran, C++, MATLAB, Git, LaTeX, Adobe Illustrator.