Berkeley Climate Change Network

BERKELEY CLIMATE MAP – Climate Finance and Economics FALL 2025

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The critical importance of climate finance is reflected in the number of financial problems and solutions currently being addressed by Berkeley faculty and staff. Much of this work is led by researchers within Haas School of Business, Rausser College of Natural Resources, L&S Social Sciences and the Goldman School of Public Policy. Current

- Social cost of carbon
- Economic impacts on agriculture, health and environment
- Quantifying economic damages from climate change
- Peaker plants vs. batteries
- Impacts on residential electricity and natural gas use
- Markets, governance and social pre-conditions
- Inequality of resources and power that impede social progress
- Renewable energy economics
- Economic policies for reducing greenhouse gases
- Retail electricity pricing models
- Social sector leadership
- Financial mechanisms for decarbonization
- Energy market economics
- Market-based environmental regulations
- Electricity market regulations
- Utility regulation
- Subsidies for agriculture
- California consumer energy finance
- Climate risk
- Sustainable investing
- Venture capital
- Green investments
- Energy transition and subsidies
- Globalization and environment
- Economic policies impact on water, air, and climate
- Harnessing finance for climate
- Mortgage markets and climate change risk
- Disaster and displacement
- Climate finance in developing nations
- Discrimination and corruption

First	Last	Affiliation 1	Affiliation 2	Summary	Selected Projects/Reports/Classes
David	Anthoff	RCNR	Energy Resources Group	Environmental economist who studies climate change and environmental policy. He co-developed the integrated assessment model FUND that is used widely in academic research and in policy analysis. He has advised numerous organizations (including US EPA and the Canadian National Round Table on the Environment and the Economy) on the economics of climate change. CEEJ Affiliate	**"Researchers provide social cost of carbon roadmap"-- Berkeley News 2021** The Biden administration is revising the social cost of carbon (SCC), a decade-old cost-benefit metric used to inform climate policy by placing a monetary value on the impact of climate change. In a newly published analysis in the journal Nature, a team of researchers lists a series of measures the administration should consider in recalculating the SCC. "President Biden signed a Day One executive order to create an interim SCC within a month and setting up a process to produce a final, updated SCC within a year," explains Gernot Wagner, a climate economist at New York University (NYU)'s Department of Environmental Studies and NYU's Robert F. Wagner Graduate School of Public Service and the paper's lead author. "Our work outlines how the administration can use the latest research in ways that take into account storms, wildfires, and other phenomena that are more devastating today than they were when the SCC was first created." Climate Change Economics – ENERES C176 001 (FALL 2023) Using ML to assess the economic impact of climatic change on agriculture, health, energy use, etc
Max	Auffhammer	RCNR	Agricultural & Resource Economics	Auffhammer's research focuses on environmental and resource economics, energy economics and applied econometrics. CEEJ Affiliate	Heat in the Heartland: Crop Yield and Coverage Response to Climate Change Along the Mississippi (2018) Quantifying Economic Damages from Climate Change (2018) – Using ML to quantify climate impacts The Spatiotemporal Pattern of Surface Ozone and Its Impact on Agricultural Productivity in China. PNAS Nexus. (conditionally accepted) The visual effect of wind turbines on property values is small and diminishing in space and time Private and External Costs and Benefits of Replacing High-Emitting Peaker Plants with Batteries. Climate Adaptive Response Estimation: Short And Long Run Impacts Of Climate Change On Residential Electricity and Natural Gas Consumption. The visual effect of wind turbines on property values is small and diminishing in space and time Private and External Costs and Benefits of Replacing High-Emitting Peaker Plants with Batteries.

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					Climate Adaptive Response Estimation: Short And Long Run Impacts Of Climate Change On Residential Electricity and Natural Gas Consumption.
Katherine	Baird	Haas		Director, Office of Sustainability and Climate Change	Haas hosted 2025 Climate Cap Summitt, 550 students from across the country. The premier learning resource for MBA students who want to engage on climate.
	Berkeley Economy and Society Initiative (BESI)	L&S Social Sciences --	Social Science Matrix	Paul Pierson Director New center at Berkeley supported by Social Science Matrix, housed in Letters and Science and funded by the Hewlett Foundation. Climate is one of 3 key themes for new BESI. Jonas Meckling leads this work. The Berkeley Economy and Society Initiative (BESI) champions next-generation thinking about markets, governance, and the social preconditions for developing and sustaining genuine prosperity. In advancing a new agenda for multidisciplinary research and informed policy conversation, we stress the need to explore enduring inequalities of resources and power that frequently impede social progress.	The Climate Seminar at BESI – Spring 2024 A $10M seed grant from the Hewlett Foundation will support a new hub for research and teaching focused on the intersection of economics and government.
Severin	Borenstein	Haas	Energy Institute at Haas	Faculty Director, Energy Institute at Haas. Climate change, energy policy, electricity deregulation, energy markets, economics of renewable energy and more.	Current projects include the economics of renewable energy, economic policies for reducing greenhouse gases, and alternative models of retail electricity pricing. Can Data Centers Flex Their Power Demands? Designing Electricity Rates for an Equitable Energy Transition (with Fowlie, Sallee)
	Center for Environmental Public Policy	Goldman		David Wooley , Executive Director. Synthesizing scientific, economic, technical, social, financial, and political understanding, CEPP collaborates to support the creation and implementation of sound public policies. CEPP's primary focus is on climate change, the key environmental challenge of our time.	2035 and Beyond: Abundant, Affordable Offshore Wind Can Accelerate Our Clean Electricity Future. Overall 2035 Project – All 4 reports – Reconductoring, Offshore Wind, Transportation and Electricity The US can reach 90 percent clean electricity by 2035, dependably and without increasing consumer bills California 100 Releases First Round of Policy and Scenario Reports Focused on State's Infrastructure Future Lead author: The Future of Energy, Environment and Natural Resources for the California 100 Project

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					Berkeley Carbon Trading Project UCOP $100M Climate Action LOI lead – January 2023 - Keeping California Climate Funding in California: Piloting Local Climate Action Funds -- Seed (Invite)
	Center for Responsible Business	Haas		Robert Strand, Executive Director Sustainable food. The Center connects students, businesses, and faculty to mobilize the positive potential of business to create a more responsible, resilient, and sustainable society. Building on more than a decade of research, teaching, and engaging with business, we educate and provoke thoughtful debate. The Center encourages sustainability-minded research and its application in the marketplace of commerce and ideas We use the words “sustainable” and “sustainability” in the broadest sense to include social, environmental, and economic considerations. This allows us to explore a wide array of issues, while retaining the flexibility to focus resources and attention for maximum impact. Our current focus areas are human rights and business, sustainable innovation, and sustainable food.	“General Mills: Driving Food Systems Change through Regenerative Agriculture” November 2019 “Reversing Climate Change Through Sustainable Food: Patagonia Provisions Attempts to Scale a “Big Wall”” April 2017
Jenny	Chatman	Haas		Interim Dean, Haas School Business Haas includes an extensive menu of research centers and institutes, including: The Institute for Business Innovation The Institute for Business & Social Impact (IBSI) Center for Responsible Business The Energy Institute at Haas (EI) Cleantech to Market Berkeley Center for Economics and Politics Center for Social Sector Leadership Fisher Center for Real Estate and Urban Economics	

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	Cleantech to Market (C2M)	Haas		Brian Steel, Co-Director Ana Martinez, Associate Director Cleantech to Market (C2M)–Inspiring Climate Tech Leadership–is a partnership between graduate students, startups, and industry professionals to help accelerate the commercialization of leading cleantech solutions. In the process, C2M also develops the next generation of innovative cleantech leaders. Startups involved in low-carbon energy, green chemistry, food, and water technologies covering both mitigation and adaptation are invited to apply into the C2M program at the beginning of each year. C2M then handpicks interdisciplinary teams of UC Berkeley grad students to help entrepreneurs identify the most viable initial markets, prospective customers and partners, funding sources, and related strategies.	16th Annual C2M Cleantech to Market Summit (2024) C2M's 2023 Climate Tech Summit featured 8 companies that are forging new paths to develop critical climate and energy solutions
	Energy and Environment Policy Lab	RCNR	ESPM	Jonas Meckling Lab - Financial mechanisms for decarbonization	How Central Banks Manage Climate and Energy Transition Risks State Capacity and Varieties of Climate Policy **Public Instituions for Cleantech Commercializing** PICC (read as 'pixie') is a collaborative research project between University of California, Berkeley and the University of Cambridge to examine institutions promoting the commercialisation of clean energy technologies in the European Union, Germany, the United Kingdom, and the United States. The net-zero transition requires both deploying existing clean energy technologies and developing new ones. In particular, the decarbonisation of sectors with hard-to-abate emissions, such as cement, steel, chemicals, aviation, and shipping, depends on emerging technologies moving from lab to market. They must be commercialised at a much faster pace than their predecessors if reaching net-zero by 2050 is to remain feasible. Research on how government institutions contribute to innovation outcomes have mainly focused on R&D-focused agencies. The principal investigators' work has, for instance, shown how, and why, funding and institutions for clean energy R&D have evolved across major economies. At the same time, more recently governments have created new institutions for commercialising clean energy technologies that have yet to be comprehensively mapped and analysed.

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					Green Industrial Strategy Project The Green Industrial Strategy Project examines how business and government can create, scale, and compete in clean tech markets to accelerate decarbonization. As clean technologies have entered the mass market, companies and countries have started to view decarbonization as an economic opportunity. They are pursuing strategies to compete in global clean technology markets. How do governments and companies develop strategies that enhance economic competitiveness and facilitate global decarbonization in a world of intensifying geo-economic competition? Founded in 2025, the Green Industrial Strategy Project addresses this pressing question by supporting the theoretical, empirical, and practical study of green industrial strategy through collaborations involving scholars, practitioners, and policymakers. The project is a collaboration between the Institute for Business in Global Society (BiGS) at Harvard Business School and the Berkeley Economy and Society Initiative (BESI) at UC Berkeley, with support from the Center for Innovation and Sustainability in Business.
	Energy Institute at Haas	Haas		Andrew Campbell, Executive Director To support current and future energy sector leaders in making important decisions, the Energy Institute's approach is to focus on business and policy challenges. Train the business and policy leaders of tomorrow on market, policy, and technology commercialization challenges in the energy industry. Produce research and analysis backed by rigorous empirical evidence and the frontiers of economic research so that energy and environmental policy and business decisions are based on sound economic and business principles.	Energy Institute Blog The Energy Institute Working Paper Series presents new research on energy and environmental topics authored by our faculty affiliates and graduate students.
Lee	Friedman	Goldman		Friedman's research is on a wide variety of issues, including climate change policies, utility regulation, educational finance, criminal justice policies, agricultural subsidies, and consumer decision-making. His work	Electricity Pricing and Electrification for Efficient Greenhouse Gas Emissions Does Policy Analysis Matter?

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				strives to improve the effectiveness of microeconomic policy analysis on actual public policies and practices.	
Chris	Jones	RCNR	Energy and Resources Group	Chris Jones is Director of the CoolClimate Network, a university-government-industry partnership at Berkeley. He also serves as faculty lecturer in the Haas School of Business, and Program Chair (13th year) of the Behavior, Energy and Climate Change Conference. Jones is a leading expert in carbon footprint analysis, the design of behavior-based programs and regional climate policy. In 2005, he published the first comprehensive carbon footprint calculator, which accounts for the greenhouse gas emissions of all transportation, energy, food, goods and services purchased by U.S. households. Versions of CoolClimate software have since been adopted by governments, businesses and non-governmental organizations throughout the United States and internationally. The research underlying these tools helps inform community and state-level climate policy. promising climate solutions.	UCOP Climate Action Award: Climate Action Planning Tools: Empowering Equitable Transitions for CA Communities CoolClimate Calculator: California Local Government Policy Tool: https://coolclimate.org CoolClimate develops and evaluates programs to engage, educate, motivate and empower individuals to take climate action. Examples include the Cool Campus Challenge and the CoolCalifornia Challenge. MBA/EWMBA 292T.14 - Carbon Footprint Analysis for Innovation FALL 2022
Ted	Lamm	Law	Center for Law, Energy and Environment	Lamm's work focuses on the development of state and local climate policies, transportation and building electrification, and climate-related risks.	The Mirage of Trump's State Climate Law Executive Order (2025) The Future of California Consumer Energy Finance 2023) Funding San Francisco Climate Action (2022) Climate Risk Scenario Analysis for the California Department of Insurance (2023)-- A Guide to Climate Risk Scenario Analysis Design for California's Insurance Regulator EV Equity Initiative (ongoing),
Adair	Morse	Haas		Professor at Haas. Founding Faculty Director, Sustainable and Impact Finance Initiative. Recent policy service: Deputy Assistant Secretary for Capital Access of the U.S. Department of the Treasury (2021-2023), overseeing the creation of Net Zero Principles, serving as the lead on the Treasury Climate Coordinating Committee, and member of the White House Industrial Strategy Group and Energy Communities Group.	Recent research centers on EV auto finance and net zero banking. Founded and runs the Climate Solutions Fund, the first student-run $2M+ climate solutions fund.
Matthew	Potts	RCNR	ESPM	Associate Director for Sustainable Development, Blum Center for Developing Economies, where he leads an interdisciplinary lab that focuses on the co-production by human and natural systems of	2023 UCOP Proposal: Proposal for Increasing CO2 Removal in California Through Science-Based Standards and Industry Engagement Criteria for High Quality Carbon-Dioxide Removal

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				ecosystem services and natural pathways for carbon sequestration. Potts is the Chief Science Officer at Carbon Direct Inc. where he leads an international science team working on decarbonizing the global economy. Specifically, Dr. Potts helps clients assess high quality carbon removal from managed landscapes and works to ensure climate actions are just and equitable. He also works closely with Carbon Direct's technology team to integrate science, software, and product	Redefining "abandoned" agricultural land in the context of reforestation. Frontiers in Forests and Global Change. Rates and drivers of aboveground carbon accumulation in global monoculture plantation forests.
Robert	Reich	Goldman		Industry, Policy, Labor, Poverty & Inequality, Leadership and Social Change, Macroeconomic Policy, Social and Economic Policy	The Solutions to the Climate Crisis No One is Talking About Robert Reich and Dan Kammen: Inequality, Climate Change and the Economy (video)
David	Roland-Holst	Goldman		Macroeconomics effects of climate change policies and green investments	Climate Change in California: Risk and Response UCOP $100M Climate Action LOI lead – January 2023 - Carbon-Negative Bioenergy for California's Disadvantaged Communities
Jim	Sallee	RCNR	Agricultural & Resource Economics,	Public economist specializing in environmental and energy economics. His research analyzes policy design and market behavior in transportation and electricity. Energy Institute @Haas	Retiring Old Capital to Foster Decarbonization Designing Electricity Rates for an Equitable Energy Transition (link) A New Charge is Coming to Your Electric Bill. Will it Make California Rates More Affordable? The Potential of and Problems with Carbon Markets in US Agriculture Retiring Heavy-Duty Trucks Price Regulation, Incidence, and the Clean Energy Transition
Joseph	Shapiro	RCNR	Agricultural & Resource Economics	Shapiro's research agenda focuses on three general questions: (1) How do globalization and the environment interact? (2) What have been the effectiveness, efficiency, and equity impacts of environmental and energy policies over the last half century, particularly for water, air, and climate pollution? (3) How important are the investments that people make to protect themselves against air pollution and climate change?	Is Air Pollution Regulation Too Stringent? Regulating Untaxable Externalities: Are Vehicle Air Pollution Standards Effective and Efficient? Pollution Trends and US Environmental Policy: Lessons from the Last Half Century
	Social Science Matrix	L&S Social Sciences		Marion Fourcade, Executive Director, Social Science Matrix Eva Seto, Associate Director, Social Science Matrix Our purpose is captured in our name: we provide an organizational framework—a "matrix"—that supports cross-disciplinary research pursued by social scientists across the University of California, Berkeley	Advanced Workshop in Climate Change Economics (video) Disaster and Displacement: Inequalities in Climate Migration (video) Climate Economics Program

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				campus and beyond. Conducts workshops and other activities on climate change. Developed an extensive directory of Berkeley social science researchers working on climate.	
	Sustainable and Impact Finance Initiative (SAIF)	Haas		Founding Faculty Director, Adair Morse Megan Morrice, Associate Director	Mobilizing Capital to Achieve Net Zero by 2050 (March 2023) Climate Solutions Fund Harnessing Finance for Climate – Stockholm (May 2023) SAIF Project: MBA Students Step Up to Help Oakland's Small Businesses What's the Climate Risk of Your Insurance Company? (blog)
Sarah	Vaughn	L&S Social Sciences	Anthropology	Vaughn is a sociocultural anthropologist working at the intersection of environmental anthropology, critical social theory, and science and technology studies. Her research advances understandings of climate change in the Circum-Caribbean while tracking the affective, ethical, and political components of dignity and belonging. At stake in her research are questions about the role climate change has in shaping the materiality of expertise, an ethics of (re)distribution, and narrative form. CEEJ Affiliate	Author: Engineering Vulnerability in Pursuit of Climate Adaptation – Massive flooding in 2005 Guyana Teaching: ANTHRO 189 - Special Topics in Social/Cultural Anthropology: Climate Change and the Senses SPRING 2024
Katherine	Wagner	RCNR	Agricultural & Resource Economics	Wagner's research focuses primarily on Environmental and Energy Economics and Public Finance. She uses a range of empirical tools to study questions related to environmental externalities, climate change, and natural resources.	
Catherine	Wolfram	Haas		Professor at the Haas School of Business and faculty affiliate at the Energy Institute at Haas. Her work includes studying energy efficiency in residential and commercial buildings and the economic impacts of energy policies aimed at reducing carbon emissions.	"Do Energy Efficiency Investments Deliver? Evidence from the Weatherization Assistance Program"
David	Wooley	Goldman		Director, Center for Environmental Public Policy	Beyond: Abundant, Affordable Offshore Wind Can Accelerate Our Clean Electricity Future. Overall 2035 Project reports California 100 Releases First Round of Policy and Scenario Reports Focused on State's Infrastructure Future

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					Lead author: The Future of Energy, Environment and Natural Resources for the California 100 Project Project 2025 Report on Transportation Much work with Port of Oakland Lead author: The Future of Energy, Environment and Natural Resources for the California 100 Project CEPP Project: Policy Options for Decarbonizing Ocean-Going Vessels
Nan	Zhou	LBNL	Building Technology & Urban Systems Division	Zhou is Head of the International Energy Analysis Department, and Lead of the China Research Program at LBNL. Zhou is also the Technical Program Lead for the Net Zero World Action Center, an initiative launched by the U.S. government to work with countries to implement their climate ambition pledges and accelerate transitions to net zero, resilient, and inclusive energy systems. In addition, she is a Co-Chair of the Academic Advisory Committee of California -China Climate Institute.	Zhou received the Outstanding Research and Contribution Prize for her 2019 publication in Applied Energy entitled, A roadmap for China to peak carbon dioxide emissions and achieve a 20% share of non-fossil fuels in primary energy by 2030, led a Berkeley Lab team.