CHLOÉ TANAKA

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HARVARD UNIVERSITY

Harvard Kennedy School
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Placement Director: Joseph Aldy joseph_aldy@hks.harvard.edu
Placement Director: Mark Shepard mark_shepard@g.harvard.edu
Administrative Director: Nicole Tateosian nicole_tateosian@hks.harvard.edu

Education

Harvard University
Ph.D. Public Policy, Economics Track, Expected Completion May 2027

University of Cambridge
M.Phil. Economics, 2016

University of Alaska Anchorage
B.A. Economics, Minor Mathematics, *summa cum laude*, 2013

Georgetown University
B.A. Economics, Minor Mathematics, First Honors, Transferred December 2010

Fields

Primary Field: Environmental and Energy Economics
Secondary Fields: Labor Economics, Education, Public Economics

References

Gordon Hanson (Chair)	**Joseph Aldy**	**Joshua Goodman**
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Fellowships & Awards

Harvard GSAS Dissertation Completion Fellowship	2026-2027
Harvard University Graduate Prize Fellowship	2021-2023
Marshall Scholarship Finalist	2014
UAA Garth N. Jones Undergraduate Award for Excellence in Writing	2013
UAA Award for Academic Excellence	2013
UAA Bradford Tuck Senior in Economics Scholarship	2011-2012

Teaching

Principles of Economics – Macroeconomics (ECON 10b), Harvard University — 2024
Teaching Fellow for Professor David Laibson and Professor Jason Furman

Principles of Economics – Microeconomics (ECON 10a), Harvard University — 2023
Teaching Fellow for Professor David Laibson and Professor Jason Furman

Research Experience

Doctoral Researcher, HKS, Reimagining the Economy, Gordon Hanson	2022-2026
Research Professional, UAA, Institute of Social and Economic Research	2013-2015
Research Assistant, UAA, Experimental Economics Lab	2011-2013

Job Market Paper

Powering the Workforce: The Role of Community Colleges in Energy Transformations

Energy transformations change the skills demanded by local employers. Whether regions can meet those demands depends on the capacity of local training institutions to adapt alongside. I study how U.S. community college programs and graduates respond to energy-induced shifts in local labor demand. I focus on two energy transformations, the shale oil and gas boom of 2000-2014 and the ongoing expansion of solar power. In both, resource endowments determine the location of economic activity, while advances in technology and policy determine the timing. Relative to colleges outside shale plays, shale-exposed colleges see a 30% increase in energy programs (e.g., Petroleum Technology, Well Drilling) and a doubling of energy graduates, while non-energy programs and graduates contract. Over the subsequent decade, the additional energy graduates exceed one third of the estimated boom-induced increase in local middle-skill energy employment. Local solar investment also adds related programs and graduates, but responses are smaller per job created than for shale. At a more granular level, solar course sections nearly double within California community colleges. Turning to student outcomes, in individual microdata from Texas, energy graduates earn 14% more over ten years than observably similar peers in other technical programs. These findings demonstrate how energy transformations shape local training opportunities, human capital accumulation, and career paths.

Publications

"Short-run impacts of a severance tax change: Evidence from Alaska."
Energy Policy, Volume 107, 2017 (with Matthew Reimer and Mouhcine Guettabi)

Research in Progress

Blowin' in the Wind: The Impact of Climate Disasters on College Majors and Innovation, *with Avinash Moorthy*

Could extreme weather influence education and career choices? This project investigates how foundational experiences with extreme weather shape human capital formation and innovative activity. We study the causal impact of exposure to extreme weather on college major choices, and on the direction, quality, and intensity of inventors' output, examining whether shifts in educational pathways serve as a mediating channel. We use NOAA records on natural disaster damages to determine the timing and location of exposure. We combine these records with administrative data on educational institutions, college student surveys, LinkedIn employment and education histories, and individual-level patent records. Comparing students and graduation cohorts exposed to major natural disasters with their unexposed counterparts, we find preliminary evidence that exposure shifts major choices toward green fields by 3-6 percent relative to baseline. Turning to inventors, we find modest effects on green innovation, with stronger responses to late exposure. Our research provides new evidence on how personal experiences shape career trajectories and the evolution of technical progress, advancing our understanding of the factors that shape the supply of skills required to address a changing environment.

The Effect of Coal Power Retirements on Labor Market Outcomes, *with Gordon Hanson*

Nearly half of U.S. coal-fired generators operating in 2000 had retired by 2022, representing more than one third of coal capacity. As electricity production shifts elsewhere, do the industries and jobs that depend on it follow? We build a dataset of roughly 1,100 coal generators, linking EIA, EPA, and FERC records on plant characteristics and regulatory exposure. Using LASSO selection models, we identify size, age, and emissions as the key predictors of closure. Retirement is largely a plant-level decision and unfolds gradually over years of declining generation. Replacement of lost capacity is also incomplete. Between 2010 and 2022, plants that retired coal generators lost roughly 80% of their coal capacity and 40% of their total generating capacity. Total capacity in their counties fell nearly 15%, while generation expanded in non-coal counties, more than offsetting the losses. We evaluate the labor market consequences of this local contraction in generating capacity.

Employment

Credit Associate, Bridgepoint Capital 2019-2021
Investment Banking Analyst, Barclays Investment Bank 2017-2019

Affiliations

Doctoral Student Fellow, Harvard Environmental Economics Program

Seminars & Conferences

Harvard/MIT Environmental Economics and Policy Seminar 2026
CERAWeek NextGen Cohort Poster Presentation 2026
Carnegie Mellon University Engineering and Public Policy, Doctoral Student Participatory Workshop on Climate and Energy Decision Making 2026

Academic Service

Peer Mentor, Kennedy PhD Student Association (KPSA) 2024-2025
Social Chair, Kennedy PhD Student Association (KPSA) 2022-2023

Policy Reports

"The economic geography of salmon: A conceptual framework and preliminary characterization of the spatial distribution of economic values associated with salmon in the Mat-Su Basin."
Alaska Department of Fish and Game, 2015 (with David Albert, David Holen, Bronwyn Jones, and Tobias Schwörer)

"Alaskan cod market analysis."
Bristol Bay Economic Development Corporation, 2013 (with Matthew Reimer)

Languages

English (native)

Citizenship

United States

Software Skills

Stata, MATLAB, ArcGIS, Python, R, LaTeX, Excel