Kaifang Luo

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Academic Positions

Postdoctoral Researcher, Department of Public Affairs, Baruch College, City University of New York — 2024 – present

Education

Ph.D. in Public Policy (specialization: Energy Economics), University of Maryland — 2019 – 2024

Master of Public Administration (M.P.A.), Central South University — 2016 – 2019

B.A. in International Economics and Trade, Huazhong Agricultural University — 2012 – 2016

Research and Teaching Areas

Research Areas: Energy and Environmental Economics; Distributional and Equity Impacts of Clean Energy Infrastructure; Program Evaluation and Causal Inference; International Clean Energy Supply Chains and Industrial Policy.

Teaching Areas: Environmental and natural resource economics; econometrics and applied microeconomics; energy and climate policy; quantitative research methods.

Publications

Peer-Reviewed Articles

Luo, K., Qiu, Y. L., Liu, P., & Mei, Y. (2026). Estimation of Property Value Changes from Nearby Carbon Capture, Utilization, and Storage Projects in the United States. *Environmental Science & Technology*, 60(37), 26306-–26318.

Luo, K.*, Li, Y.*, Chen, G., Qiu, M., Sifuentes, F., Zhang, H., & He, G. (forthcoming). Health and climate benefits of solar photovoltaic in Europe and the role of imports. *Nexus*. (*Co-first authors.)

Luo, K., Qiu, Y., & Surana, K. (2026). Network structure matters: how coordination and cooperation mechanisms drive solar-battery co-adoption. *Environmental Research Letters*, 21(1), 014039.

Lu, B., Qiu, Y. L., Wang, Z., Wang, B., Luo, K., Liu, P., ... & Li, J. (2026). Quantifying the Local Impact of Hydrogen Infrastructure: Evidence from Changes in Property Values in California. *Environmental Science & Technology*, 60(7), 5208–5218.

Luo, K., Qiu, Y. L., & Xing, B. (2022). Commercial consumers pay attention to marginal prices or average prices? Implications for energy conservation policies. *Journal of Cleaner Production*, 377, 134416.

Luo, K., Scofield, J. H., & Qiu, Y. L. (2021). Water savings of LEED-certified buildings. *Resources, Conservation and Recycling*, 175, 105856.

Manuscripts Under Review

Luo, K., Dai, F., Gordon, J., Cui, X., Kahrl, F., & He, G. The solar supply chain trilemma: Climate impact, import dependence, and economic opportunity in an era of industrial policy. Perspective, under review at *Nature Energy*. Supported by a $100,000 California-China Climate Institute grant, UC Berkeley.

Manuscripts in Progress

Luo, K., He, G., Botein, H., Heiland, F., & D'Zousa, A. Energy Burden and Disability Among Older Adults in New York City Public Housing: Evidence from a Stratified Survey of a Hard-to-Reach Population. In preparation.

Luo, K., Lashkaripour, A., Davidson, M., Mazzocco, I., & He, G. Coupling a computable general equilibrium trade model with GCAM-USA to evaluate U.S. clean energy manufacturing policy. In preparation.

Luo, K. & He, G. How AI Shapes Clean Energy Innovation: Patterns and Mechanisms in Wind, Solar, and Storage Technology Development. In preparation.

Luo, K. Do Local Costs Override Party Loyalty? Survey Evidence on Community Opposition to AI Data Centers. In preparation.

Luo, K., He, G., & Qiu, Y. L. Pricing Uncertain Futures: Forward-Looking Capitalization of Clean Energy Infrastructure Risk. In preparation.

Grants & Contracts

Co-PI, Alfred P. Sloan Foundation 2025

He, G. (PI), Luo, K. (Co-PI), Davidson, M. (Co-PI), Lashkaripour, A. (Co-PI), Mazzocco, I. (Co-PI), & Qiu, M. (Co-PI). *"Made in America? Unpacking the Drivers and Impacts of Domestic Clean Energy Manufacturing."* – $750,000 (total)

Co-PI, New York Retirement and Disability Research Center (NY RDRC), Social Security Administration 2024

He, G. (PI), Luo, K. (Co-PI), Botein, H. (Co-PI), & Heiland, F. (Co-PI). *"Exploring Energy Burden Among Older Adults and People with Disabilities in New York City Public Housing Communities."* – $100,000 (total)

Research Assistant, Alfred P. Sloan Foundation 2022 – 2024

Qiu, Y. L. (PI). "The Economics of Scaling Carbon Capture Utilization and Storage (CCUS) project."

Research Assistant, NSF Grant 2021 – 2024

Qiu, Y. L. (PI), Hultman, N. (Co-PI), & Patwardhan, A. (Co-PI). "Collaborative Research: Empirical assessment of the heterogeneous changes in electricity consumption behaviors due to co-adopting batteries, electric vehicles, and solar panels" (Award #2125775).

Research Assistant, NSF Grant 2017 – 2022

Qiu, Y. L. (PI). "CAREER: Bridging the Gap between Engineering Simulation and Reality of Home Energy-Efficiency Improvements via Big-Data Analysis" (Award #1757329).

Invited Talks and Conference Presentations

Association for Public Policy Analysis and Management (APPAM) Fall Research Conference (presented annually; 2 papers in 2023)	2022 – 2026
New York Climate Week, Panel: "Clean Energy Supply Chains in the Era of Industrial Policy" (audience of over 250)	2026
Macro Energy Systems	2026
Gordon Research Conferences	2026
Atlanta Academy on Science and Innovation Policy	2026
New York Climate Week, Panel: "Role of Clean Energy Global Supply Chains in Achieving Climate Goals" (audience of over 130)	2024
National Bureau of Economic Research (NBER): Distributional Consequences of New Energy Policies	2023
Association of Environmental and Resource Economists (AERE) Summer Conference	2023
Northeast Agricultural and Resource Economics Association (NAREA) Annual Meeting	2022
United States Association for Energy Economics (USAEE) North American Conference	2022

Teaching Experience

City University of New York, Baruch College

Guest lecturer, PAF 9199 Energy and Climate Policy (Graduate level, online)	2024

University of Maryland

Guest instructor, PLCY 689L Science & Technology Policy (Graduate level, in-person)	2026
Guest instructor, PLCY 689L Science & Technology Policy (Graduate level, online)	2025
Guest lecturer, AGNR/PLCY 301 Introduction to Sustainability (Undergraduate level, in-person)	2024
Guest instructor, PLCY 689L Science & Technology Policy (Graduate level, in-person)	2024
Guest instructor, PLCY 640 Microeconomics & Policy Analysis (Graduate level, in-person)	2023
Teaching assistant, PLCY 689L Science & Technology Policy (Graduate level, in-person)	2024
Teaching assistant, PLCY 640 Microeconomics & Policy Analysis (Graduate level, hybrid)	2021 – 2023

Selected Honors & Awards

Innovative Research Award, University of Maryland	2023

Meritorious Winner (World Top 8.88%), Mathematical Contest in Modeling (MCM) 2015

Professional Service & Experience

Research Mentor, Baruch Climate Scholars Program 2024 – present

Reviewer: Nature Communications, Nature Reviews Clean Technology, npj Clean Energy, American Journal of Agricultural Economics, Energy Economics, Environmental Research Letters, Journal of Industrial Ecology, Energy Policy, Progress in Energy, Environmental Research Communications, Energy Journal, IEEE Transactions on Engineering Management, PLOS ONE

Skills and Languages

Skills: Econometrics, Statistics, Big Data Analysis, Machine Learning

Programming & Software: Stata, Python, SQL, R, Bash scripting, GCAM (Integrated Assessment Model), LaTeX

Languages: Mandarin (native), Cantonese (native), English (fluent), Korean (basic), French (basic)