

APARAJITA DATTA

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EDUCATION

Ph.D. Candidate, Department of Political Science	Expected May 2025
College of Liberal Arts and Social Sciences, University of Houston	
Dissertation Title: Towards Energy Justice: How is Policy Feedback Shaping Energy Equity and Climate Policies in the U.S.?	
Dissertation Committee: Dr. Ling Zhu (Chair), Dr. Tanika Raychaudhuri, Dr. Ramanan Krishnamoorti, Dr. Pablo Pinto, Dr. Jason Casellas, and Dr. Francisco Cantú (deceased)	
Master of Political Science, College of Liberal Arts and Social Sciences, University of Houston	2024
Master of Public Policy, Hobby School of Public Affairs, University of Houston	2020
Master of Science, Energy Management, C. T. Bauer College of Business, University of Houston	2018
Bachelor of Technology, Computer Science and Engineering	2015
University of Petroleum and Energy Studies, India	

PEER-REVIEWED PUBLICATIONS

- **Datta, A.** (2024). Policy Feedback, Energy Equity, and Climate Justice: Can Existing Policies Improve Solar Access for Low- and Moderate-Income Americans? PS: Political Science & Politics.
- **Datta, A.**, Coates, S., Rossiter, A., and Krishnamoorti, R. (2024). Reskilling and Upskilling for the Energy Industry: The Role of Micro-credential Programs for Workforce Development. In the Journal of Continuing Higher Education.
- Vidal Bustamante, C., Hernandez, V., Kamboj, I., **Datta, A.**, and Taylor, J. (2024). Policy Priorities to Build and Sustain the US Semiconductor Manufacturing Workforce. In the Journal of Science Policy & Governance.
- Carbon Utilization Infrastructure, Markets, Research and Development: A Final Report (2024). National Academies of Sciences, Engineering, and Medicine. (Contributing Staff Member as Science and Technology Policy Fellow, Board on Energy and Environmental Systems).
- **Datta, A.** and Krishnamoorti, R. (2023). Analysis of Direct Air Capture Integrated with Wind Energy and Enhanced Oil Recovery. Environmental Science and Technology.
- **Datta, A.**, and Krishnamoorti, R. (2022). Understanding the Greenhouse Gas Impact of Deforestation Fires in Indonesia and Brazil in 2019 and 2020. Frontiers in Climate.
- Mallette, A., **Datta, A.**, and Krishnamoorti, R. (2021). Consolidated Nuclear Waste Storage in Andrews, Texas: An Integrated Technical and Policy Risk Analysis. Energy and Environment.
- **Datta, A.**, De Leon, R., and Krishnamoorti, R. (2020). Advancing Carbon Management through the Global Commoditization of CO₂ -The Case for Dual-use LNG-CO₂ Shipping. Carbon Management.
- **Datta, A.**, and Krishnamoorti, R. (2019). Opportunities for a Low Carbon Transition-Deploying Carbon Capture, Utilization, and Storage in Northeast India. Frontiers in Energy Research.

In Production:

- **Datta, A.** Leveraging Community Benefit Frameworks: Empowering Communities to Benefit from Federally Funded Energy Projects. National Academies of Sciences, Engineering, and Medicine. The National Academies Press.

Working Papers

- Who Gets to Keep the Lights on? The Administrative Burden of the Low-Income Home Energy Assistance Program & Racial Marginalization (Draft available on request)
- Race and Energy Insecurity: Are Persistent Energy Inequities an Unintended Consequence of Home Energy Assistance Programs in the U.S.? (Draft available on request)
- Geographic Representation and Energy Equity: How does the Partisan Balance in the House impact States' LIHEAP Appropriations? (Draft available on request)
- Lower Barriers, Greater Exclusion? The Effect of Waivers on Administrative Burden and Participation in SNAP (with Ling Zhu)
- The Future of the Electricity Grid in Texas (with Ramanan Krishnamoorti)

WHITE PAPERS AND RESEARCH REPORTS

- Krishnamoorti, R., and **Datta, A.** Net Zero Texas by 2050. 2024.
- Krishnamoorti, R., Radhakrishnan, S. and **Datta, A.** Net Zero in Texas: The Role of Workforce Development. 2024. (Supported by the Cullen Trust for Higher Education).
- Doucette, P., Krishnamoorti, R. **Datta, A.**, and Rossiter, A. Workforce Development for the Future of Energy. 2024.
- **Datta, A.** Climate Change and Energy Vulnerability of the American Poor. 2023.
- Krishnamoorti, R., and **Datta, A.** Net Zero in Texas: The Role of Transportation. 2023. (Supported by the Cullen Trust for Higher Education).
- Krishnamoorti, R., and **Datta, A.** Climate Resilience in Houston: Implications of IPCC's 6th Assessment Report for Houston's Climate Action. 2022.
- Buttorff, G., Kennedy, R., Krishnamoorti, R., Pinto, P., **Datta, A.**, and Banda, K. Environmental Stewardship and Employment Choices in Energy. 2022.
- Krishnamoorti R., Radhakrishnan, S., and **Datta, A.** Overview of Reporting of ESG Metrics by the Upstream Oil and Gas Industry. 2021.
- Buttorff, G., Cantú, F., Krishnamoorti, R., Pinto, P., **Datta, A.**, and Olapade, Y. Climate Change and Carbon Management: Has the U.S. Transcended Partisanship? 2021.
- Krishnamoorti, R., **Datta, A.**, Lawnin, J., Lewis, P., and McConnell, C. Advancing Sustainable Low-Carbon Energy through Convergence. 2020. (For the NSF Convergence Accelerator 2020 Workshop)
- Spitzmueler, C., Flinn, R., Krishnamoorti, R., and **Datta, A.** The Energy Workforce and COVID-19: Data-driven Policy Recommendations. 2020. (For the Offshore Mindfulness and Safety Initiative supported by the Gulf Research Program, National Academies of Sciences, Engineering and Medicine)
- Buttorff, G., Cantú, F., Krishnamoorti, R., Pinto, P., **Datta, A.**, and Olapade, Y. Carbon Management: Changing Attitudes and an Opportunity for Action. UH Energy. 2020.
- Krishnamoorti R., Radhakrishnan, S., and **Datta, A.** Opportunities and Challenges in the Permian. 2019.

OTHER PUBLICATIONS - Op-Eds

- Krishnamoorti R., and **Datta, A.** (2023, June 9). UH Researchers: Zero emissions by 2050 won't be easy. Texas better get started. Houston Chronicle.
- Krishnamoorti R., and **Datta, A.** (2022, Jan 9). Carbon ships? Path to net-zero may take an overlooked approach by sea. Houston Chronicle.
- Krishnamoorti R., **Datta, A.**, and Mallette, A. (2020, Nov 11). Nuclear waste - Texas may not be the

solution. The Hill.

- Krishnamoorti R., and **Datta, A.** (2020, June 8). The Smart Bet for Carbon Neutrality. Houston Chronicle.

CONFERENCE PAPERS, PRESENTATIONS, AND INVITED TALKS

- **Datta, A.** (2024, 2023). Who Gets to Keep the Lights On? LIHEAP's Burden & Racial Marginalization. In American Political Science Association Annual Meeting 2024, Midwest Political Science Association Annual Meeting 2024, Southern Political Science Association Annual Meeting 2024, and American Political Science Association Annual Meeting 2023.
- **Datta, A.** (2024, 2023) Energy Justice Win? Evaluating the Adoption and Diffusion of LMI Solar Incentives. In American Political Science Association Annual Meeting 2024, Midwest Political Science Association Annual Meeting 2024, Association of Public Policy Analysis and Management 2023 Fall Research Conference.
- **Datta, A.**, and Krishnamoorti, R. (2023). The Role of Micro-credential Programs for Workforce Development. In American Council for an Energy-Efficient Economy 2023 Industry Summer Study.
- **Datta, A.** (2022). Market-based Energy Policies as Promoters of Policy Diffusion: Evidence from Low- and Moderate-Income (LMI) Solar Incentives in the U.S. In Climate Pipeline Project Conference. Weatherhead Center for International Affairs. Harvard University.
- Meehan, N., Jenvey, N., **Datta, A.**, and Uppati, S. P. (2020). Carbon Intensity of Unconventional and Latin American Oil Plays. In Society of Petroleum Engineers Latin American and Caribbean Petroleum Engineering Conference.
- De Leon, R., **Datta, A.**, and Krishnamoorti, R. (2019). Techno-Economic Modeling of Dual-Purpose LNG CO₂ Shipping. In Carbon Management Technology Conference, 2019.
- De Leon, R., **Datta, A.**, and Krishnamoorti, R. (2019). Modularization & Intensification of Carbon Capture Technologies. In 11th AIChE Southwest Process Technology Conference. American Institute of Chemical Engineers.

TEACHING

- Instructor of Record, UH Energy Micro-credentialing Programs, 2020- present
 - Sustainable Energy Development
 - The Hydrogen Economy
- Teaching Assistant, C.T. Bauer College of Business
 - Strategic Management for the Oil and Gas Industry, 2018-2019
 - Strategic Leadership in the Energy Sector, 2018-2019
 - Enterprise Resource Planning, 2016-2018
- Invited Lectures
 - Arguments, Data, and Politics, 2023 and 2022
 - Strategic Leadership in the Energy Sector, 2020
 - Strategic Management for the Oil and Gas Industry, 2020

FELLOWSHIPS, GRANTS, AND SCHOLARSHIPS

- American Political Science Association, Centennial Center for Political Science and Public Affairs, Institute

for Civically Engaged Research Web Editor Fellow, 2024-2025

- American Political Science Association, JPSA-APSA Working Group on Civically Engaged Research for Critical Issues in Society, 2024
- American Political Science Association Travel Grant, Public Policy Section, 2024
- American Political Science Association, Centennial Center for Political Science and Public Affairs, Institute for Civically Engaged Research Fellow, 2024
- Christine Mirzayan Science and Technology Policy Graduate Fellow, National Academies of Sciences, Engineering, and Medicine, 2024
- Chevron Energy Graduate Fellow, 2023
- American Political Science Association Travel Grant, 2023
- Cullen Graduate Student Success Fellow, Cullen Foundation, 2022
- Climate Pipeline Project Harvard Radcliffe Institute Travel Support, Harvard University, 2022
- Carbon Dioxide Capture & Conversion Program Research Scholarship, The Catalyst Group, 2021
- Graduate Tuition Fellowship, College of Liberal Arts and Social Sciences, 2020-ongoing
- Hobby School of Public Affairs Excellence Scholarship, 2018-2020
- Texas Education Code Competitive Scholarship, 2016-ongoing

AWARDS AND HONORS

- Second Position, Coogs Energizing the Energy Transition, The Green Insider, Podcast Competition by eRenewables, 2022
- Garnett Coleman Award for Student Excellence, Hobby School of Public Affairs, 2020
- NASPAA Batten Simulation Competition, Regional Site Winner, 2020
- Inductee, Pi Alpha Alpha, 2019-ongoing
- President, Pi Alpha Alpha – UH Chapter, University of Houston, 2019-2020

COMMUNITY ENGAGEMENT

- Texas Energy Poverty Research Institute 2023-Ongoing
Collaborated on research and science communication on energy burdens in Texas. The research is based on a survey of 7,500 low-moderate income households to evaluate how energy assistance and equity disparities impact civic engagement across socioeconomic and racial groups in the state.
- Houston Energy Transition Initiative 2023
Facilitated the Houston Energy Transition Innovation Ecosystem Collaborative Session for academia, industry, and community partners to establish the roadmap for Houston to address the value chain of innovation from early stage to commercialization, enabling connections with talent, connections, resources and (use-inspired) ideas and solutions, and seamless interaction with digital, medical, aerospace and technology innovation ecosystems.
- EVolve Houston 2021-2022
Quantitative Research Support for EVolve Houston, a non-profit founded by the University of Houston, City of Houston, Shell, CenterPoint Energy, and NRG, to advance clean, equitable, and accessible transportation for Houston.
- NSF Convergence Accelerator 2020
Facilitated the Advancing Sustainable Low-Carbon Energy through Convergence National Science

Foundation Convergence Accelerator Workshop at the University of Houston to identify 18 tracks across the topic areas of a) Greenhouse gas mitigation through carbon capture, utilization, and storage; (b) Process efficiency and process electrification; (c) Integration of renewable energy and incorporation of alternate fuels; and (d) Circular plastics and chemicals.

PROFESSIONAL SERVICE

- Journal Reviewer: Energy & Environment, Urban Governance, Energy Research and Social Science, The Electricity Journal
- Reviewer: 2025 Christine Mirzayan Science and Technology Policy Graduate Fellowship Applications, National Academies of Sciences, Engineering, and Medicine
- Discussant (Panel on Civically Engaged Research), APSA Annual Meeting, 2024
- Volunteer, Fellows Advisory Group for the Office of Diversity and Inclusion, National Academies of Science, Engineering, and Medicine, 2024
- Program Support, International Conference of Young Scientists for the Global Young Academy and National Academies of Science, Engineering, and Medicine, 2024
- Program Support, Earth Day Heroes, National Academies of Science, Engineering, and Medicine, 2024
- AAPOR Programming Committee (Reviewer), AAPOR Annual Conference, 2024
- Chair and Discussant (Panel on Everyday Concerns: Housing and Transit Policy Causes and Consequences), APSA Virtual Meeting, 2024
- Discussant (Panel on Public Technologies and Institutional Behavior), APPAM Annual Meeting, 2023

UNIVERSITY SERVICE

- Researcher, University of Houston for the Texas Higher Education Coordinating Board's Accelerating Credentials of Purpose and Value Grant to UH, 2022-2024
 - NASPAA Accreditation Alumni Committee, Hobby School of Public Affairs, University of Houston, 2022
 - Critical issues in Energy Symposium Series - Planning Committee, 2020-2023
 - Research and Logistics Support, Energy Subcommittee Field Hearing - The Future of Advanced Carbon Capture Research and Development, House Committee on Science, Space, and Technology, 2019
 - Founding Dean Hiring Committee, Hobby School of Public Affairs, University of Houston, 2019-2020
 - Student Mentor Program, Hobby School of Public Affairs, University of Houston, 2019-2020
 - Supported the Center for Carbon Management in Energy, UH Energy Transition Institute, Consortium for Energy Corporate Social Responsibility, and Subsea Systems Institute by serving as a PI and as a mentor for graduate and undergraduate students, facilitating workshops, serving as a member of research focus groups, collaborating with program directors, research administrators, the media and marketing team, and other University of Houston staff for program implementation, logistics, student success and support, outreach, tracking impact metrics, and the writing and dissemination of research communication, 2018-ongoing
 - Energy Fellow - Staff Contributor, UH Energy Forbes Blogs, 2018-ongoing
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WORKSHOPS, SYMPOSIA, AND WEBINAR CONTRIBUTIONS

- Perspectives of International Graduate Students and Postdoctoral Scholars: Mindsets, Values, and Obstacles. National Academies of Sciences, Engineering, and Medicine, 2024
- Leveraging Community Benefit Frameworks: Empowering Communities to Benefit from Federally Funded Projects. National Academies of Sciences, Engineering, and Medicine, 2024

- Global CO₂ Initiative Workshop on Harmonizing Techno-Economic Assessments and Life Cycle Analyses for CCUS, University of Michigan, 2023
- Climate Pipeline Workshop, Weatherhead Research Cluster on Climate Change, Harvard University, 2022

University of Houston

- Net Zero in Texas by 2050, UH Critical Issues in Energy Symposium Series, 2022
- Carbon Management Webinar, Hobby School of Public Affairs and UH Energy, 2020
- ESG in the Energy Industry Workshop, Consortium for Energy Corporate Social Responsibility, University of Houston, 2020
- Interdisciplinary CCUS Workshop, Petroleum Research School of Norway, NorTex Petroleum Cluster and University of Houston, 2019
- Electric Vehicle Road-mapping Workshop, City of Houston, CenterPoint Energy, and University of Houston, 2019

POSTER PRESENTATIONS

- Climate Change and the Energy Vulnerability of the American Poor. 2023 Energy Research Day. University of Houston.
- The Impact of State Policies on Household Energy Burden. 2021 Graduate Research Showcase. Department of Political Science, University of Houston.
- Overcoming the Climate Policy Impasse in the United States through (Bi)partisan Motivated Reasoning. 2021 Graduate Research Showcase. Department of Political Science, University of Houston.
- Affordable Distributed Direct Air Capture: Policy Pathways. 2020 Research Day - Center for Carbon Management in Energy. University of Houston.
- Global Commoditization of CO₂: The Case for Dual-Use LNG-LCO₂ Shipping. 2020 Research Day- Center for Carbon Management in Energy. University of Houston.

RELATED EXPERIENCE

Consultant, Board on Energy and Environmental Systems, Ongoing
National Academies of Sciences, Engineering, and Medicine

- Collaborated with staff and chapter authors on response to peer review for the Consensus Study on Carbon Utilization Infrastructure, Markets, Research and Development, focusing on environmental justice, public perception, public education, and community engagement for carbon utilization;
- Authored the Proceedings for Leveraging Community Benefit Frameworks: Empowering Communities to Benefit from Federally Funded Energy Projects.

Policy Analyst, Carbon Management, Baker Hughes 2019

- Analyzed the carbon intensity and quantified the associated policy and regulatory risk of unconventional oil plays in Latin and Central America;
- Led the investment analysis for the International Finance Corporation's proposed financing of associated gas recovery, capture, and utilization projects in Iraq;
- Supported data and policy analysis for the National Petroleum Council's Roadmap on Carbon Capture, Use and Storage for at-scale CCUS deployment in the U.S.

Regulatory Analyst, L&M Environmental Response LLC

2017

- Assisted clients with specialized compliance and reporting on federal and state methane emission regulations and Leak Detection and Repair (LDAR) programs. The compliance data was used to design a proprietary app- NVIROleaks, featured in the New Orleans Entrepreneur Week, to help predict, monitor, and respond to methane leaks.
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PROFESSIONAL MEMBERSHIPS

- American Association for the Advancement of Science
- American Political Science Association
- Association for Public Policy Analysis and Management
- National Capital Area Political Science Association
- Southern Political Science Association
- Western Political Science Association

Other Professional Development and Service-oriented Memberships:

- Scholars Strategy Network
- Climate Social Science Network, Institute at Brown for Environment & Society, Brown University
- Consortium on American Political Economy, Institution for Social & Policy Studies, Yale University