

Shefali Khanna

Department of Geography and Environment s.khanna13@lse.ac.uk
London School of Economics and Political Science +44 7440 313591
Houghton Street
London WC2A 2AE
United Kingdom

Academic Appointment

The London School of Economics and Political Science

LSE Fellow in Energy Economics and Policy, 2024 -

Imperial College London

Research Associate in Energy and Environmental Economics, 2021 - 2024

Education

Ph.D. Public Policy, Harvard University, 2021.

Dissertation Title: "Essays in Energy and Development Economics"

Committee: Rema Hanna (chair), Robert Stavins, Christopher Knittel, Jie Bai

B.A Economics, *cum laude*, University of Maryland, College Park, 2012.

Research Interests

Energy and Environmental Economics, Development Economics, Applied Microeconomics

Publications

1. Khanna, S. (2025). Contracts and Constraints: How Long-Term Power Purchase Agreements Undermine Carbon Pricing in India's Electricity Sector. *The Electricity Journal* 107495.
2. Khanna, S. & Rowe, K. (2024). The Long-Run Value of Electricity Reliability in India. *Resource and Energy Economics* 77, 101425.

Research Papers

1. Khanna, S., Martin, R., & Muûls, M. Building Virtual Power Plants: Incentives and Automation for Demand-Side Flexibility.
2. Khanna, S., Mahajan, K., & Aittreya, S.R.S. Are Stubble Burning Bans Effective? Evidence from India.
3. Khanna, S. & Rowe, K. Consumption and Non-Payment Responses to Retail Electricity Prices in India.

4. Bailey, M. & Khanna, S. Industry Exit and Externalities: Evidence from Coal Phase-out Programs and Climate Change.
5. Atkinson, G., Khanna, S., Zúñiga, F. & Marino, M. The Pitfalls of the Levelised Cost of Electricity.
6. Bhogale, S. & Khanna, S. Powering More Than Pumps: Evidence on the Secondary Use of Solar Irrigation Infrastructure for Grain Milling.
7. Bhogale, S., Hasan, K., Khanna, S., Salahuddin, A. & Yunus, M. Coordinating the Flow: Collective Models for Solar Irrigation in Smallholder Systems.
8. Cropper, M. & Khanna, S. (2014). How Should the World Bank Estimate Air Pollution Damages? Resources for the Future Discussion Paper 14-30.
9. Khanna, S. & Linn, J. (2013). Do Market Shares or Technology Explain Rising New Vehicle Fuel Economy? RFF Discussion Paper 13-29.

Works in Progress

1. Khanna, S., Martin, R., Münch, F. & Saussay, A. Heat Pumps in the World: Evidence from Installations across the UK.
2. Khanna, S., Kaupa, D., Martin, R. & Muûls, M. Marginal Emissions and the Decarbonisation Potential of Electricity Load Shifting.
3. Khanna, S., Rubin, E. & Tiwari, A. The Heterogeneous Impacts of Air Pollution on Workers and Firms in India.
4. Behrer, A.P., Garg, T., Jagnani, M. & Khanna, S. The Demand for Cooling in India.
5. Garg, T., Gosnell, G., Gurguc, Z., Khanna, S. & Martin, R. Plug Adoption and Use of Smarter Energy (PAUSE) Demand.
6. Bernick, S., Khanna, S. & Muûls, M. Carbon Leakage within International Production Networks: Evidence from the EU ETS
7. Dumas, M., Gsottbauer, E., & Khanna, S. Deliberating Consumption Choices: A Field Experiment.
8. Burgess, R., Gentile, C., Khanna, S., & Reguant, M. Leveling the Playing Field: Clean Energy Dispatch under Long-Term Power Purchase Agreements in India.

Policy Writing

1. Khanna, S. (2026). Energy transition will need more than chasing the sun and harnessing the wind *The Indian Express*.
2. Khanna, S. & Jarvis, S. (2025). The promise, peril and pragmatism of Britain's nuclear "renaissance" *LSE Business Review*.
3. Khanna, S., Mahajan, K., & Aittreya, S.R.S. (2025). Clearing the Air: Do India's Crop Burning Bans Really Work? *Ideas for India*.
4. Khanna, S. (2023). Enhancing Transparency and Competitiveness in India's Electricity Sector. *Energy for Growth Hub*.

5. Abdelrehim, N., Cenci, S., Corsini, L., Dixon, J., Jones, C., Khanna, S., Mathison, C., Petersen, K. T., Turley, C., & Whitmarsh, L. (2022). The Urgency of Climate Mitigation for COP27 and Beyond. UK Universities Climate Network Briefing.
6. Khanna, S. & Rowe, K. (2021). Escaping the Subsidy-Quality Trap in India's Retail Electricity Market Ideas for India.
7. Khanna, S. & Rowe, K. (2020). Should Regulators Make Electric Utilities Pay Customers for Poor Reliability? Belfer Center for Science and International Affairs Policy Brief.

Professional Experience

Consultant, International Institute for Sustainable Development, 2023

Consultant, Energy for Growth Hub, 2022

Intern, Energy & Extractives Global Practice, The World Bank, 2018

Research Assistant for B. Kelsey Jack, Tufts University, 2016 - 2018

Research Assistant, Resources for the Future, 2012 - 2014

Affiliations

Imperial-Hitachi Centre for Decarbonisation and Natural Climate Solutions, 2023 -

J-PAL South Asia Invited Researcher, 2023 -

Grantham Institute – Climate Change and the Environment, Imperial College London, 2022 -

The James E. Rogers Energy Access Project, Duke University, 2022 -

Integrated Development of Low-Carbon Energy Systems, Imperial College London, 2021 - 2023

Harvard Environmental Economics Program, 2015 -

Evidence for Policy Design, Center for International Development, Harvard University, 2018 - 2021

Teaching and Supervision

The London School of Economics and Political Science

Energy Markets and the Clean Energy Transition. Guest Lecturer. Autumn 2025.

Imperial College London

MSc Climate Change, Management and Finance. Energy Business and Strategy. Module Leader. Summer 2024, Summer 2025.

MRes Topics in Energy and Environmental Economics. Guest Lecturer. Fall 2023.

MSc Sustainable Energy Futures. Thesis Supervisor for George Chaplin, Anakha Ajanan, Dan Valeriz and Elizabeth Evans. Summer 2023.

MSc Taxonomy, Biodiversity & Evolution. Thesis Supervisor for Anil Olgun. Summer 2022.

MSc Climate Change, Management and Finance. Business Economics, Climate Change and the Environment. Teaching Assistant for Mirabelle Muûls. Fall 2021.

Harvard University

Economics of Climate Change and Environmental Policy (Undergraduate). Teaching Fellow for Robert Stavins. Spring 2020.

Firms, Markets and Development (Masters). Course Assistant for Jie Bai. Spring 2019.

The Rise of Asia and the World Economy (Undergraduate). Teaching Fellow for Dale Jorgenson. Spring 2019.

Management of Public Infrastructure in Developing Countries (Masters). Teaching Fellow for Henry Lee. Spring 2019.

Economic Analysis of Public Policy (Masters). Teaching Fellow for Joseph Aldy. Spring 2018.

The Energy-Climate Challenge (Masters), Teaching Fellow for John Holdren and Henry Lee, Fall 2017

Rethinking Financial Inclusion (EPoD Executive Education). Teaching Fellow. October 2018.

Using Evidence to Inform Education Policy (EPoD Executive Education). Teaching Fellow. March 2018.

Using Evidence for Smart Policy Design and Implementation (EPoD Executive Education). Teaching Fellow. November 2017.

Prizes, Grants and Fellowships

Burgess, R., Gentile, C., Khanna, S., & Reguant, M. 2025. International Growth Centre. £20,000

Garg, T., Gosnell, G., Gurguc, Z., Khanna, S., & Martin, R. 2025. International Growth Centre. £99,505

Garg, T., Gosnell, G., Gurguc, Z., Khanna, S., & Martin, R. 2025. LSE Global Sustainability Research Fund. £99,250

Dumas, M., Gsottbauer, E., & Khanna, S. 2025. LSE Global Sustainability Research Fund. £88,966.

Garg, T., Gosnell, G., Gurguc, Z., Khanna, S., & Martin, R. 2025. Air and Water Labs in India: Solutions and Advancements through Research for Water and Air (SARWA). \$250,000.

Khanna, S., Rubin, E. & Tiwari, A. 2025. International Growth Centre. £18,842.

Bhogale, S., Khanna, S., & Yunus, M. 2024. International Growth Centre. £5,000.

Bhogale, S., Khanna, S., & Yunus, M. 2024. CGIAR Standing Panel on Impact Assessment (SPIA). \$9,253.

Khanna, S., Martin, R., & Muûls, M. 2023. Imperial College Business School Research Fund. £9,493.

Bhogale, S., Khanna, S., & Yunus, M. 2022. International Growth Centre. £40,000.

Bhogale, S., Khanna, S., & Yunus, M. 2022. J-PAL King Climate Action Initiative. \$74,961.

Bhogale, S., Khanna, S., & Yunus, M. 2022. J-PAL Agricultural Technology Adoption Initiative. \$10,000.

- Khanna, S., Martin, R., & Muûls, M. 2022. Private Enterprise Development in Low-Income Countries. £38,412.
- Khanna, S., Martin, R., & Muûls, M. 2022. International Growth Centre. £19,994.
- Co-Recipient of Ana Aguado Prize for Best Paper, Harvard Environmental Economics Program. 2021.
- Harvard Dissertation Completion Fellowship. 2020.
- Harvard Climate Change Solutions Fund. 2019. \$117,475.
- Khanna, S. & Rowe, K. Belfer Center for Science and International Affairs. 2019. \$10,000.
- Khanna, S. & Rowe, K. International Growth Centre. 2018. £20,000.
- Kala, N. & Khanna, S. 2018. International Growth Centre. £35,000.
- Joseph Crump Fellowship, Harvard Kennedy School. 2018 - 2019.
- Harvard South Asia Institute Graduate Research Grant. 2017.
- Vicki Norberg-Bohm Fellowship, Harvard Kennedy School. 2016.
- Departmental Honors, University of Maryland. 2012.
- John Cumberland Award in Environmental Economics, University of Maryland. 2011.

Presentations

- 2025 LSE Energy and Environmental Economics Hour, LSE Grantham Research Institute Workshop, 30th EAERE Annual Conference, RES Annual Conference, Efd Sustainable Energy Transitions Initiative (SETI) Annual Workshop, 18th European Association of Agricultural Economics (EAAE) Annual Conference, 19th Annual Environment for Development Meeting, LSE Productive and Inclusive Net Zero Research Project (PRINZ) Seminar, Workshop on Demand Flexibility and Power System Analytics at Imperial College London, India Sustainable Growth Hub Environment Day 2025, Monash Environmental Economics Workshop 2025 (declined)
- 2024 AEA@ASSA, SES Annual Conference (declined), CEPR-NBB Joint Research Workshop on Reaching Net-Zero: Electricity Markets, Carbon Pricing, and Firms' Responses, Loughborough University Economics Department Seminar, 12th Mannheim Conference on Energy and the Environment (declined), Duke Energy Access Project Researcher Meeting, 14th Toulouse Conference on the Economics of Energy and Climate, Sustainable Energy Transitions Initiative Annual Workshop, 10th Atlantic Workshop on Energy and Environmental Economics, Heartland Environmental and Resource Economics Workshop, Harvard Environmental Economics Program Alumni Workshop, Southeastern Workshop on Energy & Environmental Economics & Policy (declined), Environment for Development Annual Meeting (declined), Data, Information, and the Environment Workshop, BREW-ESA, IGIDR Third Biennial Conference on Development, ACEGD (ISI Delhi), Council on Energy, Environment and Water
- 2023 AERE@ASSA, RES Annual Conference, ETH Zürich, Asian Development Bank, Economics of Low-Carbon Markets Workshop, EEA-ESEM Barcelona WinE Retreat, BIEE Research Conference, ISI Delhi CECFEE Research & Policy Workshop
- 2022 RES Easter Training School, 9th Mannheim Conference on Energy and the Environment, LSE Imperial College Workshop in Environmental Economics, AERE@WEIA Annual Conference, Atlantic Workshop on Energy and Environmental Economics, 27th EAERE Annual Conference, RES Junior Symposium, Environmental Protection and Sustainability Forum, LSE Environment Week, IAEE Webinar, IDLES Conference, OSWEET

- 2021 AERE@MEA Annual Meeting, EMEE Summer Workshop, Sustainable Energy Transitions Initiative (SETI) Research Meeting on Energy and Development, Sustainable Energy Transitions Initiative (SETI) Virtual Workshop, IIT Kanpur, ISI Delhi, Institute for Policy Integrity (NYU School of Law), EfD Annual Meeting (discussant), Imperial College London (Economics and Public Policy department seminar, IDLES Researcher Meeting, Urban Systems Lab), ACEGD (ISI Delhi)
- 2019 12th International Workshop on Empirical Methods in Energy Economics, Northeast Workshop on Energy Policy and Environmental Economics, EAERE-ETH Winter School on the Economics of Energy Transition
- 2018 Colorado Technology Primer for Economists and Social Scientists, Price Theory Summer Camp, Becker Friedman Institute for Economics at the University of Chicago
- 2017 Berkeley/Sloan Summer School in Energy and Environmental Economics

Academic Service

Referee for *American Economic Review*, *American Economic Review: Insights*, *The Energy Journal*, *The Electricity Journal*, *Journal of Industrial and Business Economics*, *Journal of the Association of Environmental and Resource Economists*, *Journal of Environmental Economics and Management*, *Energy Economics*, *Resource and Energy Economics*, *Poverty & Public Policy*, *Nature Climate Change*, *Global Challenges & Regional Science*

Co-Organiser, LSE Grantham Research Institute Research Seminar Series, 2025-26

Co-Organiser, LSE Internal Workshop on Energy Economics and Policy, September 2025

Postdoc Rep and Research Committee Member, Imperial College Business School

Interviewer, BSc Economics, Finance and Data Science, Imperial College Business School

Co-Organiser, Harvard Environmental Economics Lunch

Professional Memberships

Royal Economic Society

The Econometric Society

British Institute of Energy Economics

American Economic Association

Association of Environmental and Resource Economists

Miscellaneous

Languages: English, Hindi

Software: R, Stata, Python, SurveyCTO, L^AT_EX

Citizenship: India (UK Indefinite Leave to Remain)