

Gaurav Doshi

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Research Interests

Energy and Environmental Economics, Industrial Organization

Education

Ph.D. in Applied Economics, University of Wisconsin-Madison	Expected 2022
B.S. & M.S. in Economics, Indian Institute of Technology Kanpur	May 2017

Research

Job Market Paper

“Wiring America: The Short- and Long-Run Effects of Electricity Grid Expansion”

Abstract: The US needs significant investment in electricity transmission lines in order to de-carbonize the power sector. This paper examines the short- and long-run effects of large scale electricity grid expansion. I focus on the rollout of a grid expansion project that linked windy areas in west Texas to population centers in the east. Short-run analysis shows that: (1) Transmission expansion led to moderate declines in fossil fuel generator markups, about 2.5% during peak demand hours and 7% during off-peak hours. (2) It also prevented \$53 million (2020 \$) worth of annual damages from emissions. Long-run analysis finds evidence of higher wind capacity (+202%), more wind turbines (+245%), and bigger wind projects (+121%) in counties with transmission infrastructure. These results highlight that investments in grid level storage and upgrades can be useful in enhancing the value of estimated benefits.

Publications

“Transmission Integration and the Market for Congestion Revenue Rights,” with Sheldon (Xiaodong) Du, 2021. *The Energy Journal* 42(5), 247-281.
<https://doi.org/10.5547/01956574.42.5.gdos>

Working Papers

“Market Structure and Technology Adoption: Evidence from Renewable Energy,” with Sarah Johnston

“An Equilibrium Analysis of Power Purchase Agreement,” with Yeon Ju Baik (*submitted*)

Other Research

“Trade Growth Accounting in Goods and Services: An Empirical Exercise,” with S.K. Mathur, S. Singh, and A. Shrivastava, 2017. In: Mathur S., Arora R., Singh S. (eds) *Theorizing International Trade*. Palgrave Macmillan, Singapore.

https://doi.org/10.1007/978-981-10-1759-9_5

Honors, Fellowships, and Awards

UW-Madison Student Research Grant Competition Award	2021
Barbara Forrest Paper Prize for Best Pre-Dissertation Paper	2020
Kenneth and Pauline Parsons Graduate Award	2019
Academic Excellence Award, Indian Institute of Technology Kanpur	2017
Graduate Research Award (MHRD, India) for Masters’ at IIT Kanpur	2016 - 17
Merit cum Means Scholarship, Indian Institute of Technology Kanpur	2015 - 16

Conference and Seminar Presentations (* co-author presented)

2022: ASSA/AEA Annual Meeting (*scheduled*)

2021: Student Research Colloquium (UW-Madison); MEA Annual Meeting; Online Summer Workshop in Environment, Energy, and Transportation (OSWEET); AERE Summer Conference; Empirical Methods in Energy Economics (EMEE) Summer Workshop; CU Environmental & Resource Economics Workshop* (*scheduled*); Environment and Natural Resources Seminar (UW-Madison)

2020: Environment and Natural Resources Seminar (UW-Madison)

2019: Student Research Colloquium (UW-Madison); AAEA Annual Meeting

2018: Environment and Natural Resources Seminar (UW-Madison)

Teaching Experience (TA)

AAE 722: Machine Learning in Applied Economic Analysis (4.43/5)	Summer 2019
AAE 350: World Hunger and Malnutrition (4.46/5)	Spring 2019

Research Experience

Research Assistant to Prof. Sarah Johnston, UW-Madison	2020 - 22
Research Assistant to Prof. Sheldon Du, UW-Madison	2017 - 18
Research Assistant to Prof. Siddharth Chandra, Michigan State University	2016 - 17

Professional Service

Referee: *The Energy Journal*

Conference reviewer: AAEA Annual Meeting (2019)

Coordinator, Student Research Colloquium, AAE, UW-Madison

2019 - 21

Citizenship

India (F-1 Visa)

Last updated: September 2, 2021