

## Anant Sudarshan

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CONTACT INFORMATION University of Warwick S2.92 Social Sciences Coventry, CV47AL, UK ☎ (+44)7759-808-316 ✉ anant.sudarshan@warwick.ac.uk I: www.anantsudarshan.com

APPOINTMENTS **Asst. Professor** University of Warwick Department of Economics Sep 2022 - present

**South-Asia Director** Energy Policy Institute at Chicago (India) University of Chicago Dec 2017 - Sep 2022

**India Director** Energy Policy Institute at Chicago (India) University of Chicago Aug 2014 - Nov 2017

**Senior Research Associate (PI Status)** Department of Economics University of Chicago Aug 2014 - Sep 2022

**Harvard Kennedy School** Sustainability Science Fellow Harvard University April 2011 - Aug 2014

**MIT Energy Initiative** Research Scientist Massachusetts Institute of Technology Sep 2013 - Aug 2014

**Abdul Latif Jameel Poverty Action Lab** Senior Research Manager IFMR April 2011 - Aug 2014

**Sequoia Capital** Consultant Mumbai, Stanford Sep 2009 - Mar 2010

**The Energy and Resources Institute** Research Associate New Delhi, India May 2006 - April 2007

EDUCATION **Stanford University**, Stanford, CA, USA  
Ph.D, Management Science and Engineering, March 2011  
Master of Science, Mechanical Engineering, 2006

**Indian Institute of Technology**, New Delhi, India  
Bachelor of Technology, Mechanical Engineering, 2004

PUBLICATIONS Modeling fine-grained spatio-temporal pollution maps with low-cost sensors. Nov 2022. *npj Climate and Atmospheric Science* 5, 76 (2022). (with Shiva Iyer, Ananth Balashankar, William H. Aeberhard, Ulzee An, Sujoy Bhattacharya, Giuditta Rusconi, Anant Sudarshan, Rohini Pande, Lakshminarayan Subramanian).

Rationing the commons. 2022. *Journal of Political Economy*. 130:1, 210-257 (With Nicholas Ryan)

The Impact of Temperature on Productivity and Labor Supply: Evidence from Indian Manufacturing. 2021. *Journal of Political Economy*. 129:6, 1797-1827 . (with E.

Somanathan, Rohini Somanathan, and Meenu Tewari)

'The Consequences of Treating Electricity as a Right'. 2020. *Journal of Economic Perspectives*. Vol 34 (1), pp 145-169 (with Robin Burgess, Michael Greenstone, and Nicholas Ryan).

'Nudges in the marketplace: The response of household electricity consumption to information and monetary incentives'. 2017. *Journal of Economic Behavior and Organization*, Vol. 134, pp. 320-335

'The Solvable Challenge of Air Pollution in India.' *India Policy Forum 2017*. (with Michael Greenstone, Santosh Harish, Rohini Pande).

'Lower Pollution, Longer Lives: Life Expectancy Gains if India Reduced Particulate Matter Pollution'. 2015. *Economic and Political Weekly*, L(8), pp. 40-46. (with Michael Greenstone, Janhavi Nilekani, Rohini Pande, Nicholas Ryan, Anish Sugathan)

'Deconstructing the Rosenfeld Curve: Making sense of California's low electricity intensity'. 2013. *Energy Economics*, Vol. 39, 197-207.

'Real-time Feedback and Electricity Consumption: A Field Experiment Assessing the Potential for Savings and Persistence'. 2013. *The Energy Journal*, Vol. 34(1). (with Sebastien Houde, Annika Todd, June A. Flora and Carrie K. Armel)

'Psychohistory Revisited: Fundamental issues in forecasting climate futures'. 2011. *Climatic Change*, Vol. 104(3-4), pp 457-472. (with Cullenward, D., Schipper, L., and Howarth, R).

'Transport and carbon emissions in the United States: The long view'. 2011. *Energies (Special Issue on Energy-Friendly Transportation)*, Vol. 4(4). pp 563-581. (with Schipper, L. and Saenger, C.).

'How can economic schemes curtail the increasing sex ratio at birth in China?'. 2008. *Demographic Research*. Vol 19. pp. 1831-1850. (with Bhattacharjya, D., Tuljapurkar, S., Shachter, R. and Marcus Feldman).

'Weather data mining using independent component analysis.' 2004. *Journal of Machine Learning Research*. Vol 5. pp. 239-253. (with Basak, J., Trivedi, D. and M. S. Santhanam).

#### BOOKS AND CHAPTERS

Noronha, Ligia and Anant Sudarshan (eds). 2009. *India's Energy Security*. Routledge Contemporary South Asia Series. New York: Routledge

Coal Supply: The Fallacy of Abundance. 2008. In S.K.Chand (editor). *The Coal Dilemma*. New Delhi: TERI Press.

Monitoring Industrial Pollution in India. Forthcoming. In T. Madon et al (eds). *Introduction to Development Engineering*. Springer Nature.

#### WORKING PAPERS

The Demand for Electricity on the Global Electrification Frontier. 2021. (With Robin Burgess, Michael Greenstone, Nicholas Ryan). Under Revision for the *American Economic Review*.

The Social Costs of Keystone Species Collapse: Evidence From The Decline of Vultures in India. Under Revision for the *American Economic Review*. (With Eyal Frank)

Can Pollution Markets Work In Developing Countries? Experimental Evidence from India. (With Michael Greenstone, Rohini Pande, Nicholas Ryan).

Liquidity Constraints: Allocating Clean Water to the Rural Poor. (With Fiona Burlig and Amir Jina).

Quantifying the effect of domestic travel bans on COVID-19 infections. 2020. (With Fiona Burlig and Garrison Schlauch)

Electricity Supply and Economic Growth: Evidence from a Large Experiment in Bihar (With Robin Burgess, Michael Greenstone, Nicholas Ryan)

## GRANTS

2023: Electric cooking, household air pollution, women's time use, and health (*King Climate Action Initiative*)

2023: Using Smart Meters to Reduce Electricity Theft and Improve Supply. (*King Climate Action Initiative*)

2021: Market mechanisms for allocating clean water: Experimental evidence from India (*Templeton World Charity Foundation*)

2021: Scaling Market-based Schemes for Air Pollutants (*King Climate Action Initiative*)

2020: Experimental Evidence on the Impacts of Cash Transfers to Migrant Laborers During the COVID-19 Pandemic (*Becker Friedman Institute*)

2020: Experimental Evidence on the Impacts of Cash Transfers to Migrant Laborers During the COVID-19 Pandemic (*Weiss Fund for Research in Development Economics*)

2019: Direct Benefit Transfer of Electricity Subsidy in Punjab (*Bill and Melinda Gates Foundation*)

2018: Direct Benefit Transfer of Electricity Subsidies (*J-PAL Governance Initiative*)

2018: Direct Benefit Transfer of Electricity Subsidy in Rajasthan (*MCP Foundation*)

2016: Design, Implementation and Evaluation of a Pilot Emissions Trading Scheme (*MacArthur Foundation*)

2016: Enabling air quality with better monitoring, energy efficiency and market measures (*USAID*)

2016: Trust and the purchase of energy efficient durable goods (*E2e Design Competition*)

2016: Agricultural Electricity Subsidy Reform and Power Leakage in Rajasthan (*J-PAL Governance Initiative*)

2015: Harnessing Transparency Initiatives to Improve India's Environmental Clearance Process (*International Initiative for Impact Evaluation*)

2015: Transparent Environmental Regulation and Industrial Performance (*Private Enterprise Development for Low-Income Countries*)

2015: Heat Islands and the Long-Term Environmental Impact of Urbanization (*University of Chicago*)

2015: Asymmetric Information and the Energy-Efficiency of Durable Goods: Evidence from Cooking Stoves in India (*International Growth Centre - India*)

2015: Harnessing Transparency Initiatives to Improve India's Environment and Forest Clearance Process (*International Initiative for Impact Evaluation*).

2014: Continuous Emissions Monitoring of Particulate Matter in Indian Industry (*USAID Development Innovation Ventures*)

2014: Lighting Up Bihar: Electricity Service Delivery as a Collection Action Problem (*J-PAL Urban Services Initiative*)

2013: Building Environmental Regulation that Enables Growth (*International Growth Centre - India*)

2013: Lighting Up Bihar: Electrification to Sustain Economic Growth (*International Growth Centre - Bihar*)

2013: Building Capacity to Use Research Evidence (*Department for International Development*)

2013: Shaping Environmental Policy for Co-benefits (*Shakti Sustainable Energy Foundation, Climateworks*)

2013: Pilot Project to Design and Evaluate Incentive Schemes to Promote Sustainable Urban Transportation in India (*J-PAL Urban Services Initiative*)

INVITED AFFILIATIONS	Associate Editor, ACM Journal on Computing and Sustainable Societies (2022-). Associate Editor, Environment and Development Economics (2016-2021). Member of Climate Change, Environment, and Ecology Working Group, Social Sciences Grand Challenge, University of Warwick Research Associate, STICERD Economics of Environment and Energy Program, London School of Economics Research Affiliate, International Growth Centre. Fellow, Energy for Growth Hub, 2018-2021. Research Affiliate, International Growth Centre. GRIHA Technical Advisory Committee (Behavioral Economics), 2015 Steering Committee on air pollution, Ministry of Health, Government of India, 2015 Technical Committee on Emissions Monitoring, Central Pollution Control Board, 2014
TEACHING EXPERIENCE	<b>University of Warwick</b> , Coventry, UK Term 2 2022-2023: Development Economics (MRes Year 2 Module) <b>University of Chicago</b> , Chicago, USA Fall 2018-2019: Environment and Development Spring 2019-2021: Energy in the Developing World <b>Ahmedabad University</b> , Chicago, USA 2022: Evidence-Based Environmental Policy Design <b>Ashoka University</b> , Haryana, India 2015: Introduction to Environmental Studies (Lead Instructor) <b>Stanford University</b> , Stanford, CA, USA 2009: Sustainable Mobility (Lead TA for Prof. Lee Schipper) 2010: Energy and Environmental Policy Analysis (Lead TA for Prof. James Sweeney) 2010: Brainstorming India (Lead Instructor)
POPULAR WRITING	Columns in print and online media including <i>Forbes</i> , <i>The Indian Express</i> , <i>The Hindustan Times</i> , <i>The Economic Times</i> , <i>Outlook Magazine</i> , <i>VoxDev</i> , <i>Vox.eu</i> , <i>Ideas for India</i>
LANGUAGES	English, Hindi. Also R, MATLAB, STATA, Python, Mathematica