## JUNJIE ZHANG

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INTERESTS	Environmental and resource economics, applied econometrics	
EDUCATION	PhD in Environmental and Resource Economics, Duke University MS in Environmental Engineering, Tsinghua University BS in Environmental Engineering, Tsinghua University BA in Environmental Economics, Renmin University of China	2003-2008 2001-2003 1999-2001 1996-2001
PRIMARY APPOINTMENT	<b>Duke Kunshan University</b> , Kunshan, Jiangsu, China Environmental Research Center Master of Environmental Policy (iMEP) Program Director and Associate Professor of Environmental Economics	2016-
	<b>Duke University</b> , Durham, NC, USA Nicholas School of the Environment Associate Professor of Environmental Economics	2016-
	University of California, San Diego, La Jolla, CA, USA School of Global Policy and Strategy Associate Professor of Environmental Economics Assistant Professor of Environmental Economics	2015-2016 2008-2015
OTHER AFFILIATIONS	Chinese Academy of Environmental Science Vice Chair of the Subcommittee on Environmental Economics East Asian Association of Env. & Resource Economics, Auditor Nicholas Institute, Duke University, Advisory Board Member Professional Association for China's Environment, Board Member Asia Society, Senior Adviser UCE <sup>3</sup> , UC Santa Barbara, Visiting Scholar	2017- 2016- 2015- 2012- Fall 2011
EDITORIAL POSITIONS	China Economic Review, Co-Editor Journal of Environment & Development, Editorial Board Marine Resource Economics, Associate Editor	2017- 2016- 2011-2016
Publications	Li, J. and J. Zhang (2018). "Regional Cooperation on Carbon Markets in East Asia". <i>Asian Development Review</i> 35.2.	

- Cui, J., J. Zhang, and Y. Zheng (2018). "Carbon Pricing Induces Innovation: Evidence from China's Regional Carbon Market Pilots". *AEA Papers and Proceedings* 108, pp. 453–57.
- Morris, S. D. and J. Zhang (2018). "Validating China's Output Data Using Satellite Observations". *Macroeconomic Dynamics*, pp. 1–28.
- Yang, Y., J. Zhang, and C. Wang (2018). "Forecasting China's Carbon Intensity: Is China on Track to Comply with Its Copenhagen Commitment?" *Energy Journal* 39.2, pp. 147–171.
- Zhang, P., O. Deschenes, K. Meng, and J. Zhang (2018). "Temperature Effects on Productivity and Factor Reallocation: Evidence from a Half Million Chinese Manufacturing Plants". *Journal of Environmental Economics and Management* 88, pp. 1–17.
- Zhang, J. and Q. Mu (2017). "Air pollution and defensive expenditures: Evidence from particulate-filtering facemasks". *Journal of Environmental Economics and Management*.
- Zhang, J., Z. Wang, and X. Du (2017). "Lessons learned from China's regional carbon market pilots". *Economics of Energy & Environmental Policy* 6.2, pp. 1–20.
- Zhang, P., J. Zhang, and M. Chen (2017). "Economic impacts of climate change on agriculture: The importance of additional climatic variables other than temperature and precipitation". *Journal of Environmental Economics and Management* 83, pp. 8–31.
- Wang, C., Y. Yang, and J. Zhang (2015). "China's sectoral strategies in energy conservation and carbon mitigation". *Climate Policy* 15, pp. 60–80.
- Ghanem, D. and J. Zhang (2014). "Effortless perfection: Do Chinese cities manipulate air pollution data?" *Journal of Environmental Economics and Management* 68.2, pp. 203–225.
- Zhang, J. and C. Wang (2014). "China's hydrofluorocarbon challenge". *Nature Climate Change* 4.11, pp. 943–945.
- Bi, J., O. Young, R. Costanza, L. Liu, R. Kasperson, Y. Qi, D. Guttman, K. Jiang, D. Mazmanian, S. Zhang, J. Zhang, G. Osherenko, R. Percival, B. Zhang, H. Wang, P. He, and M. Liu (2014). "Same dream, different beds: Can America and China take effective steps to solve the climate problem?" *Global Environmental Change* 24.1, pp. 2–4.
- Liu, A. and J. Zhang (2013). "Fiscal decentralization and environmental infrastructure in China". *B.E. Journal of Economic Analysis and Policy* 13.2, pp. 733–759.
- Zhang, J., J. Fleming, and R. Goericke (2012). "Fishermen's perspectives on climate variability". *Marine Policy* 36.2, pp. 466–472.
- Zhang, J. and M. Smith (2011a). "Estimation of a generalized fishery model: A two-stage approach". *Review of Economics and Statistics* 93.2, pp. 690–699.

Li, S., Y. Liu, and J. Zhang (2011). "Lose some, save some: Obesity, automobile demand, and gasoline consumption". Journal of Environmental Economics and Management 61.1, pp. 52-66.

Zhang, J. and M. Smith (2011b). "Heterogeneous Response to Marine Reserve Formation: A Sorting Model approach". Environmental and Resource Economics 49.3, pp. 311-325.

Zhang, J. and C. Wang (2011). "Co-benefits and additionality of the Clean Development Mechanism: An empirical analysis". Journal of Environmental Economics and Management 62.2, pp. 140–154.

Zhang, J. (2011). "Behavioral response to stock abundance in exploiting commonpool resources". B.E. Journal of Economic Analysis and Policy 11.1.

Smith, M., J. Zhang, and F. Coleman (2008). "Econometric modeling of fisheries with complex life histories: Avoiding biological management failures". Journal of Environmental Economics and Management 55.3, pp. 265–280.

Smith, M., J. Zhang, and F. Coleman (2007). "Structural modeling of marine reserves with Bayesian estimation". Marine Resource Economics 22.2, pp. 121– 136.

Smith, M., J. Zhang, and F. Coleman (2006). "Effectiveness of marine reserves for large-scale fisheries management". Canadian Journal of Fisheries and Aquatic Sciences 63.1, pp. 153–164.

## **OTHER**

Huang, Z. and J. Zhang (2018). "Developing Non-Market Approaches through PUBLICATIONS Regional Cooperation Platforms". In: Stavins, R. N. and R. C. Stowe. International Cooperation in East Asia to Address Climate Change. Harvard University Belfer Center.

> Zhang, J. (2018). Evaluating Green Investment on One Belt and One Road. People's Publishing House (in Chinese).

> Ge, C., A. Ju, J. Zhang, H. Li, and Z. Dong (2017). Progress on Environmental Economics. Vol. 11. China Environmental Science Press (in Chinese).

> Auffhammer, M., C.-Y. C. L. Lawell, J. Bushnell, O. Deschenes, and J. Zhang (2016). "Economic considerations: Cost-effective and efficient climate policies". In: Bending the Curve: Ten Scalable Solutions for Carbon Neutrality and Climate Stability. Ed. by V. Ramanathan. Vol. 2. 1. Collabra. Chap. 4, pp. 1–14.

> Zhang, J. (2013). "The incentives for China's climate actions". International Affairs Forum 4.1, pp. 27–31.

> Zhang, J. (2012). Delivering Environmentally Sustainable Economic Growth: The Case of China. Asia Society Policy Report.

> Zhang, J., S. Zeng, and J. Chen (2004). "A Cost-Effectiveness Analysis for Urban Wastewater Reuse and Long Distance Water Transfer". China Water & Wastewater (Chinese) 20.11, pp. 22–24.

Zhang, J., Y. Zhang, J. Chen, and T. Zhang (2003). "Residential willingness-to-pay for reclaimed water". *China Water & Wastewater (Chinese)* 19.6, pp. 96–98.

Zhang, J., J. Zou, and J. Chen (2003a). "Emission reduction costs in fuel switching". In: *Studies on Climate Change: Progress and Outlook (Chinese)*. Ed. by X. Lu. China Meteorological Press.

Zhang, J., J. Zou, and J. Chen (2003b). "On the dynamic CO<sub>2</sub> emission baselines in the thermal power sector". In: *Studies on Climate Change: Progress and Outlook (Chinese)*. Ed. by X. Lu. China Meteorological Press.

Zou, J., J. Chen, J. Zhang, C. Wang, N. Ai, and X. Qi (2001). "Why did the Bush Administration withdraw the U.S. commitment to control CO<sub>2</sub> emissions?" *Environmental Protection (Chinese)* 5, pp. 36–38.

SELECTED	John V. Krutilla Research Stipend	2011
Honors &	Hellman Fellowship	2011
AWARDS	Dr. SY. Hong Award for Outstanding Article	2008
	Joseph L. Fisher Doctoral Dissertation Award	2007
	Award for Outstanding Graduates in Tsinghua University	2003
	Award for Outstanding College Students in Beijing	1999

#### **GRANTS**

National Natural Science Foundation of China #71773043, PI 2018-2022 "An Empirical Study of Air Pollution Cost through the Defensive Expenditure Approach"

National Natural Science Foundation of China #71773062, co-PI 2018-2022 "Impacts of Air Pollution on Labor Market and Economy: Analysis through Coupling Econometric and CGE Models"

National Natural Science Foundation of China #71771010, PI 2017-2018 "Analysis of the Potential Risks and Policy Responses of the United States' Withdrawal from the Paris Agreement"

The Energy Foundation, PI 2017-2018 "An Economic Analysis of the Top-Level Design of Chinas Carbon Market"

U.S. National Science Foundation #1600267, PI 2016-2019 "Coastal SEES Collaborative Research: Climate change impacts on the sustainability of key fisheries of the California Current System"

Chinese Research Academy of Environmental Sciences, PI 2017
"Application of Cost-Benefit Analysis in China's Water Pollution Law"

Chinese Academy for Environmental Planning, PI 2016-2017 "Index System of Regional Environmental Credit in China"

Policy Research Center for Environment and Economy, PI 2016 "Application of Cost-Benefit Analysis in China's Environmental Policy"

UC Center for Energy and Environmental Economics, PI 2012-2014 "Air Pollution and Avoidance Behavior: Information and Misinformation"

Resources for the Future, PI

2011-2012

"Carbon Market, Agglomeration Externalities and Wind Power Investment in China: A Structural Approach"

U.S. National Oceanic and Atmospheric Administration #T03503, PI 2010-2012 "The Impact of Climate Change on Fishery Production"

U.S. National Science Foundation, Co-I

2010-2016

"Ecological Transitions in the California Current Ecosystem: Phase II"

U.S. National Science Foundation, Co-I

2009-2011

"Maps and Locals: A Cross-Site LTER Comparative Study of Land-Cover and Land-Use Change with Spatial Analysis and Local Ecological Knowledge"

UCSD Chancellor's Interdisciplinary Collaboration Program, Co-PI 2008-2009 "Coastal zone fish and fisheries in the Gulf of California

CONSULTING
SERVICES

Ministry of Environmental Protection	2016-2017
Jiangsu Department of Environmental Protection	2016-2017
Friedrich-Ebert-Stiftung	2016-2017
Energy Foundation (China)	2016-2017
Asian Development Bank	2016-2017
World Bank	2012-2016
Korean Association of Industrial Organization	2013-2014
Bertelsmann Foundation/Asia Society	2012-2013

### SEMINARS &

2018:

**CONFERENCES** World Congress of Environmental and Resource Economists, Sweden

Southwest University of Finance and Economics, School of Public Admin

Sichuan University, College of Architecture and Environment

Southwest Jiaotong University, Faculty of Geosciences and Env Engineering

Fudan University, School of Data Science

Shanghai Forum

Chinese Environmental Scholars Forum, Durham, NC, USA

Peking University, College of Environmental Sciences and Engineering

Renmin University of China, School of Environment and Natural Resources

Dalian University of Technology, School of Env Science & Technology

Shanghai University of Intl Business and Economics, School of Business

Shanghai Institute for International Studies

Fudan-Tsinghua Joint Workshop on Big Data in Social Science

Xiamen University, College of the Environment and Ecology

Peking University, National School of Development

National University Singapore, Department of Economics

National Climate Strategic Center

Wuhan University, School of Economics and Management AEA, Philadelphia

#### 2017:

**EU-Shenzhen ETS Conference** 

China Environment Chamber of Commerce

Nanfang Daily

MEP Chinese Academy of Environmental Planning

Sun Yat-sen University, School of Government

Chinese Society for Environmental Sciences, Env. Econ., Chengdu

Wuhan University, Conference on Law and Economics

Harvard Project East Asia Workshop, Shanghai

Nicholas Institute of Environmental Policy Solutions, Duke University

Nicholas School of the Environment, Duke University

Chinese Academy of Sciences, Institute of Science and Development

Asian Development Review (ADR) Conference, Seoul, South Korea

Green China Development Forum, Heilongjiang

Kubuqi International Desert Forum, Inna Mongolia

Duke Kunshan Workshop on Electricity Market Reform, Beijing (organizer)

Duke Kunshan Workshop on Cost-Benefit Analysis, Beijing (organizer)

Ji'Nan International Forum, Shandong

Duke International Forum, Duke Kunshan University (organizer)

Hong Kong University of Science and Technology, Division of Social Science

Asia Society Workshop on Carbon Market Linkage, Hong Kong

Shanghai Jiaotong University, Antai College of Economics and Management

Stanford & RFF 2017 China GHG Policy Workshop, Palo Alto

#### 2016:

Harvard University Workshop on China's Carbon Market, Beijing

Council on Foreign Relations, New York City

Wuhan University, School of Economics and Management

Wuhan University, School of Law

Chinese Academy of Environmental Science, 2016 Green Finance Summit

Southwestern University of Economics and Finance

Chinese Society for Environmental Sciences, Env. Econ. (organizer)

Shanghai Business Education and Training Center

JiNan University, Institute for Economic and Social Research

INECE, Next Generation Compliance and Enforcement, Beijing

Tsinghua University, Green Cities in Asia, Beijing

Fudan University, RICE/CCES Salon

Fudan University, School of Economics

CCICED, Workshop on Cost-Benefit Analysis, Beijing

Chinese Academy of Sciences, Institute of Science and Development

Chinese Academy of Sciences, Nanjing Institute of Geography and Limnology

Nicholas Institute for Environmental Policy Solutions, Durham, NC, USA

CESPN, E-webinar

Zhejiang University of Technology, School of Environment

Nanjing University, School of the Environment

Eco Forum Global, Guiyang Shanghai Forum Mindshare Energy Symposium: Alberta, Canada UC Davis, Department of Agricultural and Resource Economics UCSB Confucius Institute Environment Conference: Santa Barbara, CA King Abdullah Petroleum Studies and Research Center: London, UK Society for Benefit-Cost Analysis: Washington, DC

Earlier Conferences: AAEA 2007; AERE Summer Conference 2011, 2012, 2014; All-UC Conference in Energy and Environmental Economics 2013, 2014 ASSA 2008, 2010, 2011, 2014, 2015; Camp Resources XXI: Wilmington 2014; GEF China Climate Technology Needs Assessment Conference 2012; Governors' Global Climate Summit 2009 Heartland Workshop on Environmental and Resource Economics 2014; IIFET 2006; International Conference on EU Environmental Policies and Their Enlightenment 2001; NBER, Conference on the Economics of Environmental Protection in China 2014; Occasional California Workshop: UC Santa Barbara 2013, 2015 Professional Association for China's Environment: Nanjing, China 2015; UCSD Food & Fuel for the 21st Century Symposium 2015; UCSD Renewable Energy Conference 2012 (organizer); USAEE/IAEE: Anchorage, AK 2013 Shanghai Forum 2013

Earlier Seminars: Aquarium of the Pacific; Aspen Congressional Program; Beijing University of Chemical Technology, School of Economics & Management; Claremont McKenna College, The Robert Day School; Duke Kunshan University: Kunshan, China; Duke University, Nicholas School of the Environmental; Georgia Institute of Technology, School of Economics; Resources for the Future; Iowa State University, Department of Economics; Joint Institute for Marine and Atmospheric Research, Honolulu, HI; King Abdullah Petroleum Studies and Research Center: Riyadh, Saudi Arabia; Korea Development Institute; Nanjing University, School of the Environment Pacific Islands Fisheries Science Center, Honolulu, HI; Peking University, School of Economics; Sam Houston State University, Department of Economics; Shanghai University of Finance and Economics, School of Economics; Soongsil University, Department of Economics; Stanford University, Shorenstein APARC; The University of New Mexico, Department of Economics; Tsinghua University, School of the Environment, School of Public Policy and Management; UC Institute on Global Conflict & Cooperation; UC Davis, Agricultural and Resource Economics; UCLA, Luskin School of Public Affairs; UC San Diego, Department of Economics, IR/PS, SIO; UC Santa Barbara, Department of Economics; University of Hawaii at Manoa, Department of Economics; University of Southern California, School of International Relations; Xi'an Jiaotong University, School of Finance and Economics

#### REFEREE SERVICES

**Journals**: American Journal of Agricultural Economics, Applied Energy, B.E. Journal of Economic Analysis and Policy, Canadian Journal of Agricultural Economics, China Economic Review, Climate Change Economics, Climatic Change, Ecological Economics, Economic Inquiry, Energy Policy, Environment and Development Economics, Environmental Economics and Policy Studies, Environmental Science and

Technology, Frontiers of Environmental Science and Engineering, International Journal of Sustainable Transportation, Journal of the Association of Environmental and Resource Economists, Journal of Cleaner Production, Journal of Comparative Economics, Journal of Environment and Development, Journal of Environmental Economics and Management, Journal of Environmental Management, Journal of Industrial Ecology, Journal of Public Economics, Land Economics, Marine Resource Economics, Philosophical Transactions B, Regional Science and Urban Economics, Resource and Energy Economics, Review of Economics and Statistics, Science of the Total Environment, World Bank Economic Review, World Development

**Grants**: Alaska Sea Grant College Program, Maine Sea Grant College Program, National Oceanic and Atmospheric Administration, National Science Foundation, Ohio Agricultural Research and Development Center

**Organizations**: Agricultural and Applied Economics Association, Association of Environmental and Resource Economists, European Association of Environmental and Resource Economists, IEEE Green Technologies Conference, World Congress of Environmental and Resource Economics, United Nations Environment Programme

Publishers: MIT Press, Princeton University Press, Routledge, Wiley-Blackwell

#### TEACHING Duke Kunshan:

Environmental Economics (iMEP) Chinese Environmental Policy (GLS)

#### **UC San Diego:**

Data and Methods (Economics PhD)

International Environmental Policy and Politics (GPS Masters)

Sustainable Development (GPS Masters)

Chinese Energy and Environmental Policy (GPS Masters)

Intro to Marine Biodiversity, Conservation, and Global Change (SIO/IGERT)

Natural Resource Economics (Economics PhD)

**Economics of Energy Policy (GPS Masters)** 

Econ Prep (GPS Masters)

Environmental Capstone (co-teaching, GPS Masters)

#### **ADVISING Duke University**: Yating Li (UPEP, in progress), Wumeng He (UPEP, in progress)

**UC San Diego**: Ben Gilbert (Economics '11, University of Wyoming), Kevin Novan (Economics '12, UC Davis), Anthony Liu (Economics '12, RFF and CK-GSB), Dalia Ghanem (Economics '13, UC Davis), Tamara L. Sheldon (Economics '15, University of South Carolina), Matthew Gibson (Economics '15, Williams College), William Leung (Economics '15, UC Davis), Jacob Johnson (Economics '16, Accounting Principals)

Other Institutions: Peng Zhang (UC Santa Barbara '16, Hong Kong Polytech-

#### nic University)

#### MEDIA COVERAGE

International: Asia Development Bank, Asia Society, CCTV America, Channel NewsAsia, ChinaFile, CNN, Edmonton Journal, E&E News, Financial Times, Forbes, Gas 2, Guardian, International Business Times, Oil and Gas Journal, Scientific American, South China Morning Post, The Diplomat, The International, The Straight Dope, Wall Street Journal

Chinese: Xinhua, People's Daily, Guangming Daily, Caixin, Economic Observer, China Economic Information, China Youth Daily, Yabuli Chinese Entrepreneur Forum, Southern Weekly, Tencent News, Beijing Youth Daily, Sina, Liaowang Institute, Legal Daily, Modern Express, China Dialogue, CETIN, Oriental Outlook, Phoenix Weekly, Mirror Books Global Times, CNPolitics.org, Jiangsu Banking Industry, China Environmental Management, Chinese Environmental News, FT Chinese, Journal of Translation from Foreign Literature of Economics

#### OP-ED

Mitigating climate threat to China's food security July 28, 2017, China Daily

Will China Take the Lead on Climate Change? November 21, 2016, ChinaFile

Is China Doing Enough for the Environment? March 11, 2016, ChinaFile

What Would New Breakthroughs on Climate Change Mean for the U.S.-China Relationship? September 16, 2015, ChinaFile

Why the US and China Should Focus on Air Pollution to Tackle Climate Change March 6, 2014, Asia Society

Are the US and China Finally Getting Serious About Climate Change? September 12, 2013, CNN Global Public Square

How Will China's New Leaders Approach Rising Tide of Environmental Protests? November 9, 2012, Asia Society

New Report Shows Climate Change Actually a 'Regressive Tax' On World's Poor

September 25, 2012, Asia Society

Averting China's Fishing Wars May, 2012, Asia Society

OP-ED IN CHINESE

Do Not Blame Online Shopping for Packaging Wastes

December 13, 2017, China Environment News

We Should Also Listen to Those Who Benefit from Environmental Regulation September 25, 2017, China Environment News

China Should Adopt Cost-Benefit Analysis in Environmental Policy Making 2017, China Environmental Management, 9(4):20-22

When the U.S. Withdraws from the Paris Agreement, What Should China Do? June 6, 2017, FT Chinese

Opportunities and Challenges for Green Finance March, 2017, Jiangsu Banking Industry

What Should Regulators Do Between Finance and Industry? May 24, 2017, Economic Observer

Make Green Investment Profitable May 17, 2017, China Economic Information

Can Other Firms Follow Delong's Environmental Leadership? April 28, 2017, Yabuli China Entrepreneur Forum

Global Climate Governance: From China's Plan to China's Action November 23, Guangming Daily

An Interview with Environmental Economist Professor Zhang Junjie October 8, 2016, Economic Information Translation Cluster

The U.S. Is the Biggest Uncertainty in Implementing the Paris Agreement. April 23, 2016, Caixin.com

Taxation is better than driving restrictions to curb air pollution. January 22, China Youth Daily

The Opportunities and Challenges of Environmental Protection during the Thirteenth Five-Year Plan.

January 20, 2016, Outlook Weekly

MEMBERSHIPS American Economic Association

Association of Environmental and Resource Economists

LANGUAGES Chinese (native)

English (fluent)

# COMPUTER SKILLS

Python, R, JavaScript, MATLAB, SAS, Arc GIS, Maple, Mathematica, S-Plus, Stata, HTML, CSS, PHP, MySQL, PostgreSQL, C/C++, Visual Basic, BUGS, UNIX/Linux, LATEX

Last Updated: June 15, 2018