

Yu Wang

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Education

Georgia Institute of Technology, Ph.D., Public Policy, 2014
Shanghai Jiao Tong University, M.S., Environmental Science and Engineering, 2008
National University of Singapore, exchange student, 2006
Shanghai Jiao Tong University, B.S., Natural Resources & Environment, 2005

Employment History and Profession Appointments

Associate Professor, Department of Political Science, Iowa State University, 2021 – present
Assistant Professor, Department of Political Science, Iowa State University, 2014 – 2021
Graduate Research Assistant, Georgia Institute of Technology, Atlanta, GA, 2010-2014
Project Manager, GT-Shanghai Summer Program, 2009
Graduate Teaching Assistant, Georgia Institute of Technology, Atlanta, GA, 2010-2014

Journal Articles

- Alvina Aui, Yu Wang, Mark Mba-Wright. (2021) Meta-analysis of economic feasibility of cellulosic ethanol technologies. Accepted at *Renewable & Sustainable Energy Review*.
- Yang, C., Wang, Y., Dong, Z. (2020) Evaluating the impact of denitrification tariff on energy-related NOX generation in China: policy effects and regional disparities. *Energy Policy*. 142. 111520, ISSN 0301-4215.
- Chen, C.-F., Wang, Y., Adua, L., & Bai, H. (2020). Reducing Household Fossil Fuel Consumption by Enabling Technology and Behavior. *Energy Research and Social Science*, 60:101402.
- Chien-fei Chen, Tianzhen Hong, Gerardo Zarazua de Rubens, Selin Yilmaz, Karol Bandurski, Zsófia Deme Bélafi, Marilena De Simone, Mateus Vinícius Bavaresco, Yu Wang, Pei-ling Liu, Verena M. Barthelmes, Jacqueline Adams, Simona D'Oca, Łukasz Przybylski, Culture, conformity, and carbon? A multi-country analysis of heating and cooling practices in office buildings, *Energy Research & Social Science*, Volume 61, 2020, 101344, ISSN 2214-6296
- Yu Wang, Ming-Hsun Cheng, and Mark Mba-Wright. Life-cycle energy consumption and greenhouse gas emissions from corn ethanol in China. *Biofuels Bioproducts & Biorefining*. 2018; 12: 1037-1046
- Yu Wang and Ming-Hsun Cheng. Greenhouse Gas Emissions Embedded in US-China Fuel Ethanol Trade: A Comparative Well-to-Wheel Estimate. *Journal of Cleaner Production*. 2018 (183): 653-661
- Yu Wang. Overview of State Policies for Energy Efficiency in Buildings. *Current Sustainable and Renewable Energy Reports*. 2018: 5(1): 101-108
- Wenliang Li, Zhou Y, Cetin KS, Yu S, Wang Y, Liang B. Developing a landscape of urban building energy use with improved spatiotemporal representations in a cool-humid climate. *Building and Environment*. 2018; 136:107–17
- Wenliang Li, Yuyu Zhou, Kristen Cetin, Jiyong Eom, Yu Wang, Gang Chen, Xuesong Zhang, Modeling urban building energy use: A review of modeling approaches and procedures, *Energy*, Volume 141, 2017, Pages 2445-2457
- Marilyn Brown, Yu Wang. Energy-Efficiency Skeptics and Advocates: The Debate Heats Up as the Stakes Rise. *Energy Efficiency*, 2017; 10(5): 1155-1173
- Ming-Hsun Cheng, Minliang Yang, Yu Wang. American's Energy Future: An Analysis of the Proposed Energy Policy Plans in Presidential Election. *Energies*, 2016, 9, 1000

- Brown, Marilyn, Yu Wang, Benjamin Sovacool, Anthony D'Agostino. 2014. Forty Years of Energy Security Trends: A Comparative Assessment of 22 Industrialized Countries." *Energy Research & Social Science* 4: 64–77.
- Wang, Yu and Marilyn Brown. (2014) Policy Drivers for Improving Electricity End-Use Efficiency in the U.S.: An Economic-Engineering Analysis. *Energy Efficiency*. 7(3): 517-546
- Knox-Hayes, Janelle, Marilyn Brown, Benjamin Sovacool, and Yu Wang. 2013. "Understanding Attitudes toward Energy Security: Results of a Cross-National Survey" *Global Environmental Change*, 23: 609-622.
- Wang, Yu, T. Yuan, and J. Hu (2009) Anaerobic Digestion Behavior and Risks of Environmental Hormones in Municipal Sewage Water. *Environmental Science*. 30(8): 1716-1721
- Wang, Yu, T. Yuan, and J. Hu. (2008). Treatability Study of the Selected Endocrine Disrupting Chemicals in An Anaerobic Sequencing Batch Reactor. *Research of Environmental Sciences*, 21(2), 145-149
- Wang, Yu, T. Yuan, J. Hu, and W. Wang (2008) Application of Proteomic Technology to the Analysis of Endocrine Disrupters. *Environmental Science & Technology*. 31(6): 11-21
- Cheng, Jinping, T. Yuan, X. Ji, M. Zheng, Y. Wang, W. Wang, and Q. Zhang (2006) Analyzing Differentially Expressed Genes in the Brain of Rat Exposed to Mercury Chloride Using cDNA Microarray. *Environmental Science*. 24(4)

Book & Book Chapter

- Marilyn Brown and Yu Wang. Green Savings: How Policies and Markets Drive Energy Efficiency. *Preager*. Santa Barbara. September 2015
- Yu Wang. Book chapter "America's Energy Transition: Paradigm Shift and Policy Challenges" in Foreign Policy Issues for America: The Trump Years. Edited by Richard Mansbach and James McCormick. Routledge. 2019

Technical Reports & Policy Briefs

- Abigail Morton, Yu Wang & Wendong Zhang (2021) Willingness to Participate in Demand Response in the US Midwest: A Market with Great Potential? Center for Agriculture & Rural Development, Iowa State University, Ames, Iowa. <https://www.card.iastate.edu/products/publications/synopsis/?p=1320>
- Marilyn A Brown, Yu Wang, Xiaojing Sun. (2015) Cool Buildings: Bundled Policies to Promote Super-efficient Space Conditioning. Georgia Institute of Technology, School of Public Policy Working Paper #87
- Brown, M. and Y. Wang. (2013) Estimating the Energy-Efficiency Potential in the Eastern Interconnection. Oak Ridge National Laboratory, Oak Ridge, TN.
- Deitchman, B., M. Brown, and Y. Wang. (2012) Making Buildings Part of the Climate Solution with Flexible Innovative Financing. Georgia Institute of Technology, School of Public Policy Working Paper #73
- Brown, M., E. Gumerman, Y. Baek, J. Wang, C. Morris, and Y. Wang. (2010) Renewable Energy in the South. Southeast Energy Efficiency Alliance. Atlanta, GA

Manuscripts Submitted & Work in Progress

- Robert Urbatsch, Yu Wang. Religiosity and energy-policy preferences. R&R at Energy Research & Social Science.
- Yu Wang. Electricity Deregulation and the Adoption of Energy Efficiency Policies: Empirical Evidence from American States. Manuscript in progress.
- Yu Wang. Sensitivity Analysis for Fuel Ethanol Production. Work in Progress
- Yu Wang. Estimating Emission Reduction Benefits from Energy Efficiency and Demand Response Using Marginal Emissions Factors: A MISO Case. Work in progress
- Yu Wang, M. Brown, Majid, Amadi, Mariam Marante. Key Design Features for Delivering Energy Efficiency: A Review of Awarding Winning Programs. Work in Progress
- Yu Wang. "China's Fuel Ethanol Industry: Current Status and Policy Trends". Work in progress

Conference Presentations & Proceedings

- “Post-RFS Supports for Cellulosic Ethanol: Model-Based Analysis of Alternative Policies”. The 42nd Fall Research Conference of Association of Public Policy Analysis & Management (APPAM), November 11-13, 2020
- “Impact of Demand Response on Flexibility Services and Transmission Investment” Accepted by the 52nd North American Power Symposium (NAPS). Scheduled on April 11-13, 2021 at Tempe, AZ
- “Capacity Size and Learning of Cellulosic Ethanol”. Association of Public Policy Analysis & Management (APPAM) 2019 Fall Research Conference, 11/9, Denver, CO
- “Marginal Emission Factors and Estimation of Emission reduction Benefits: A MISO case” 2018 Fall Research Conference of the Association for Public Policy Analysis and Management. Washington D.C. 11/10/2018
- “Key Design Features for Delivering Energy Efficiency: A Review of Awarding Winning Programs” 2017 Fall Research Conference of the Association for Public Policy Analysis and Management. Chicago, IL 11/3/2017
- “Decoupling electricity utilities: “coupled” policy diffusion among American states” 1st International Conference on Energy Research & Social Science. Energy For Society. Sitges, Spain, 4/3/2017
- “Does Market Deregulation Affect Energy Efficiency? Empirical Evidence from Policy Adoption across States” 2016 Fall Research Conference of the Association for Public Policy Analysis and Management. Miami, FL. 11/6/2016
- “Diffusion along transmission lines: the case of utility decoupling policy” 2015 Fall Research Conference of the Association for Public Policy Analysis and Management. Miami, FL. 11/14/2015
- “Wind Energy and Negative Pricing: Is Production Tax Credit to Blame?”. The 5th Energy Policy Research Conference. Denver, CO. 09/03/2015
- “Policy Pathway of Reducing Carbon Abatement Cost”. 2014 Fall Research Conference of the Association for Public Policy Analysis and Management. Albuquerque, NM. 11/06/2014
- “Policy Drivers for Improving Electricity End-Use Efficiency in the U.S.: An Economic-Engineering Analysis” 2013 ACEEE National Conference on Energy Efficiency as a Resource. Nashville, TN. Sep 23, 2013
- “The Eastern Interconnection: Exploring its Efficiency Potential” Meeting of the Eastern Interconnection States Planning Council. Boston, MA. May 31, 2012
- “Improving Efficiency in Building Electricity Use: What are the Policy Options?” Workshop for Original Policy Research. Georgia Institute of Technology. Atlanta, GA. Oct 21, 2011

Invited Talks

- “Leading the Way: Women Tell the Stories of Climate Change” Panel Discussion at the Climate Change Theater Production. Ames, IA, 10/06/2019
- “Economic Studies of new renewable dispatchable power resources: An Analysis of Diesel Engine and Combustion turbines”. The 56th EPRC Annual Conference and the 2019 Electric Power Forum. Ames, IA, 5/22/2019
- “Climate Change & Politics: Stagnant Public Solutions and Emerging Private Governance” at Our Impact Event for Environment Science. Ames, IA, 5/16/2019
- “Societal study of energy/power systems: Modeling and Analysis of Energy Policies” ERC Preparation Workshop, Minneapolis, MN, 12/18/2018
- “Regional Techno-economic (TEA) and Life Cycle Analysis (LCA) of the Pyrolysis-Bioenergy-Biochar Pathway” USDA Climate and Agroecology Project Directors' Meeting. D.C. 12/07/2018
- “A Model-Based Assessment of Socioeconomic, Policy, And Environmental Implications For Sustainable Bioenergy” USDA Annual PD Meeting. Tampa, FL. 10/21/2017
- “China’s Fuel Ethanol: A Strategy to Mitigate Pollution & Climate Change”. Pella Central College, IA, 3/28/2017
- “Energy Efficiency Policy in the United States”. China University of Geosciences. Wuhan, China. 05/11/2016
- “Impacts of the Clean Power Plan: An Investigation using the National Energy Modeling System (NEMS)”. Iowa NSF EPSCoR Energy Policy Workshops. Ames, IA. 03/09/2016

- “Integrating wind power into the grid: the case of PTC and negative pricing”. NSF WESEP Seminars: Wind Energy Science, Engineering, and Policy. Ames, IA. 09/03/2015

Teaching

Pol S 443x/543x Energy Policy
 Pol S/ BRT 515 Biorenewables Laws and Policy
 Pol S/BRT 516 International Biorenewables Policy
 Pol S 344 Fundamentals for Public Policy
 ME 510x Economics and Policy for Energy Systems

Grants

- Endowment by esteemed alum Dwight Ink, Evaluation of the Socio-economic and Environmental Benefits from Demand Response: Program Implementation and Effectiveness
 PI: Yu Wang, 08/16/2021-12/21/2021
- Alfred Sloan Foundation, Future growth of diverse demand response resources and their impact on transmission and distribution
 PI: Kristin Cetin, Co-PI Yu Wang, James McCalley, 08/15/2019 - 08/14/2021,
- NSF, CNH2-L: Sustainable field-to-market supply chains enabled by blockchain networks.
 PI: Mark Mba-Wright, Co-PI: Yong Guan, Crystal Lu, Yu Wang, Lisa Shute-Moore, 01/01/2020 - 12/31/2023
- USDA/NIFA-BNRE, A Model-based Assessment of Socioeconomic, Policy, and Environmental Implications for Sustainable Bioenergy
 PI: Yu Wang, Co-PI: Mark MBA-Wright, Dermot Hayes, and Emily Heaton, (3/15/2017-3/14/2022)
- Iowa State University LAS Travel Award
 PI: Yu Wang (10/1/2018-6/1/2019)
- Iowa Energy Center, Developing a Landscape of Building Energy Use in the City of Des Moines, Iowa
 PI: Yuyu Zhou, Co-PI: Yu Wang and Bingqi Liang. (8/1/2016-1/30/2018)
- NSF, REU Site: A National REU Site in Wind Energy Science, Engineering and Policy
 PI: John Jackman; Co-PI: David Peterson (3/1/2015-2/28/2018)
- ISU LAS Seed Grant, China’s Biofuel Struggle: An Investigation of Policy Process for Renewable Transport Fuels
 PI: Yu Wang (7/1/2016-6/30/2017)
- ISU ELO New Course Development Grant for Pol S/ BRT 516
 PI: Yu Wang (7/1/2016-6/30/2017)
- NSF, Iowa EPSCoR seed grant
 PI: Yu Wang (5/1/2015-4/30/2016)
- ISU Tall Prairie Grass Workshop, Faculty Development Grant
 PI: Yu Wang (5/1/2015-4/30/2016)
- ISU Starting Grant
 PI: Yu Wang (8/25/2014-7/30/2016)
- Georgia Institute of Technology, School of Public Policy Travel Grant for Graduate Student
 PI: Yu Wang (1/1/2013-12/330/2013)

Fellowships, Awards & Honors

- 2019, Eni Award on Energy Transition, Final List
- 2017, ISU Canvas Early Adopter Award
- 2013, Outstanding PhD Student in the School of Public Policy
- 2010, CETL/BP Outstanding Graduate Teaching Assistant Award Finalist
- 2006, Philips Scholarship of Shanghai Jiaotong University
- 2005, Outstanding College Graduates of Shanghai City, Top 1%

- 2003, National Scholarship for Outstanding Student

Institutional and Professional Service

2017 Review Panelist for Graduate Research Fellowship Program, NSF
 Faculty Colloquium Planning Committee, ISU
 Master of Science in Information Assurance Committee, Department of Political Science, ISU, present
 Faculty Award Committee, ISU,
 Graduate Admission Committee, Department of Political Science, ISU,

Manuscript Reviews & Editorial Board

Current Sustainable/Renewable Energy Reports (Section Editor – End-Use Efficiency)
 Journal of Policy Analysis and Management
 Journal of Cleaner Production
 Global Environmental Change
 Energy Efficiency
 Energy Research & Social Science
 Energies
 Energy Report
 Journal of Management and Sustainability

Membership

Association for Public Policy Analysis and Management
 American Council for an Energy-Efficient Economy
 Social Science, Engineering, Computing Research in Energy Topics
 Energy and Social Science Network

Skills

Energy modeling: NEMS, GREET	Programming: Visual Basic, Fortran
Statistics: Stata, R, SAS	Language: Chinese
Data Mining: Nvivo	

Leadership & Extracurricular Experiences

2009, GT-Shanghai Summer Program, Project Manager
 Supervised and administered program activities to ensure academic success and student safety. Coordinated with hosts and volunteers to assist students adapt to local environment. Organized field trips, contests and debates to boost cultural exchange.

2005 – 2008, SJTU Student Recreation Center, Financial Supervisor
 Coordinated budget planning and examined financial reports. Oversaw and processed payrolls for over 400 student employees. Executed marketing strategies and pro bono activities. Organized activities to enhance employee performance