

Dr. Yeong Jae Kim

CONTACT INFORMATION
KDI School of Public Policy and Management
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Last updated: May 2024

PROFESSIONAL EXPERIENCE

| | |
|--|-------------------|
| Associate Professor KDI School of Public Policy and Management | 01/2023 - Present |
| Director Sustainable Development Lab @ KDI School | 01/2023 - Present |
| Adjunct Professor School of Management Engineering, KAIST | 08/2023 - Present |
| Affiliated Scientist RFF-CMCC European Institute on Economics and the Environment (EIEE) | 08/2022 - Present |
| Assistant Professor KDI School of Public Policy and Management | 08/2022 - 12/2022 |
| Junior Scientist RFF-CMCC European Institute on Economics and the Environment (EIEE) A research institute co-founded by Resources for the Future (RFF) and the CMCC Foundation – Euro-Mediterranean Center on Climate Change (CMCC) | 2019 - 2022 |
| Visiting Professor School of Management Engineering, KAIST | 2021 |
| Senior Research Associate (Postdoc) Tyndall Centre for Climate Change Research (HQ) | 2017- 2019 |
| Research Assistant Samsung Economic Research Institute, Seoul, South Korea | 2009 |
| Analyst American International Group, Inc., Seoul, South Korea | 2007- 2009 |
| Analyst Hyundai Motor Company, Headquarter, Seoul, South Korea | 2007 |

EDUCATION

| | |
|---|-----------------|
| Ph.D., Georgia Institute of Technology, Public Policy (Environmental Economics) (Dr. Marilyn Brown, Kaye Husbands Fealing, Erik Johnson, and Pat McCarthy) | 05/2017 |
| M.S., Texas A&M University, Agricultural Economics | 08/2011 |
| B.S., Hanyang University, Seoul, South Korea, Mechanical Engineering | 02/2007 |
| Exchange Student, University of Texas at Austin, Mechanical Engineering | 08/2005-08/2006 |

RESEARCH
INTERESTS

Environmental and Energy Economics, Economics of Innovation, Behavioral Economics, Applied Microeconometrics, and Program Evaluation

PEER REVIEWED
ARTICLES

- [1] Sanni, M., & Kim, Y. J. (2023). How open are African inventors? Open green technologies and patenting activities in Africa. *African Journal of Science, Technology, Innovation and Development*. <https://doi.org/10.1080/20421338.2023.2287001>
- [2] Kim, Y. J., & Cho, S.-H. (2023). Is the discovery of oil a blessing or curse in the era of climate change? *Resources Policy*. <https://doi.org/10.1016/j.resourpol.2023.104264>
- [3] Herman, K. S., Kim, Y. J., Shayegh, S., & Xiang, J. (2023). A Critical Review of Green Growth Indicators in G7 Economies from 1990 to 2019 *Sustainability Science*. <https://doi.org/10.1007/s11625-023-01397-y>
- [4] Kim, Y. J., & Verdolini, E. (2023). International knowledge spillovers in energy technologies *Energy Strategy Reviews*, 49, 101151. <https://doi.org/10.1016/j.esr.2023.101151>
- [5] Hyun, M., Cherp, A., Jewell, J., Kim, Y. J., & Eom, J. (2023). Feasibility trade-offs in decarbonising the power sector with high coal dependence: The case of Korea. *Renewable and Sustainable Energy Transition*, 100050. <https://doi.org/10.1016/j.rset.2023.100050>
- [6] Choi, D., & Kim, Y. J. (2023). Local and global experience curves for lumpy and granular energy technologies. *Energy Policy*, 174, 113426. <https://doi.org/10.1016/j.enpol.2023.113426>
- [7] Kim, Y. J., Soh, M., & Cho, S.-H. (2022). Identifying optimal financial budget distributions for the low-carbon energy transition between emerging and developed countries. *Applied Energy*, 326, 119967. <https://doi.org/10.1016/j.apenergy.2022.119967>
- [8] Kim, Y. J. (2022). The countervailing effects of stocks of knowledge on low-carbon innovation through international collaboration. *Energy Policy*, 170, 113217. <https://doi.org/10.1016/j.enpol.2022.113217>
- [9] Kim, Y. J., Cho, S.-H., & Sharma, B. P. (2021). Constructing efficient portfolios of low-carbon technologies. *Renewable and Sustainable Energy Reviews*, 150, 111515. <https://doi.org/10.1016/j.rser.2021.111515>
- [10] Hyun, M., Kim, Y. J., & Eom, J. (2020). Assessing the impact of a demand-resource bidding market on an electricity generation portfolio and the environment. *Energy Policy*, 147, 111918. <https://doi.org/https://doi.org/10.1016/j.enpol.2020.111918>
- [11] Kim, Y. J., & Wilson, C. (2019). Analysing Energy Innovation Portfolios from a Systemic Perspective. *Energy Policy*, 134 (2019) 110942. <https://doi.org/10.1016/J.ENPOL.2019.110942>
- [12] Kim, Y. J., & Wilson, C. (2019). Analysing Future Change in the EU's Energy Innovation System. *Energy Strategy Reviews*, 24C (2019) pp. 279-299. <https://doi.org/10.1016/j.esr.2019.04.012>
- [13] Kim, Y. J., & Brown, M. A. (2019). The impact of domestic energy-efficiency policies on foreign innovation: the case of lighting technologies. *Energy Policy*, 128, 539-552. <https://doi.org/10.1016/j.enpol.2019.01.032>

- [14] Kim, Y. J., Husbands Fealing, K., & Klochikhin, E. (2018). Patenting activity in the food safety sector. *World Patent Information*, 55, 27-36.
<https://doi.org/10.1016/J.WPI.2018.08.005>
- [15] Brown, M. A., Baer, P., Cox, M., & Kim, Y. J. (2014). Evaluating the risks of alternative energy policies: a case study of industrial energy efficiency. *Energy Efficiency*, 7(1), 1-22.
<https://doi.org/10.1007/s12053-013-9196-8>

BOOK CHAPTERS
AND REPORTS

- [1] Verdolini, E., Reis, L. A., Drouet, L., Tavoni, M., Kim, Y. J., Bonacorsi, L., ... Edenhofer, O. (2021). The international dimension of the EU low-carbon transition.
- [2] Karakosta, C., Papapostolou, K., Granado, P. C. del, Egging, R., Welisch, M., Hartner, M., ... Johansen, U. (2019). Navigating the roadmap for clean, secure and efficient energy innovation: Final report on SET-Nav policy briefs
- [3] Granado, P. C. del, Welisch, M., Hartner, M., Resch, G., Lumbreras, S., Olmos, L., ... Ansari, D. (2019). Summary Report "SET-Nav-Integrative policy recommendations" Decarbonization the EU's Energy System
- [4] Global Innovation Index 2018 Report published by Cornell University, INSEAD, and the World Intellectual Property Organization: Technology-Specific Analysis of Energy Innovation Systems (with Charlie Wilson)
- [5] Kaye Husbands Fealing, Stanley Johnson, John L. King, and Julia Lane, *New Pathways to Research Impact: Case of Food Safety*, Cambridge University Press. Chap 9: patenting across businesses (with Evgeny Klochikhin and Kaye Husbands Fealing)

UNDER REVIEW

The air quality effects of Uber (with Luis Sarmiento)

The Status of Electric Vehicle Charging Stations in Korea (with David Woo)

Energy Transitions Post–Russia–Ukraine War: Challenges and Policy Implications in Germany and Italy (with Seong-Hoon Cho and Kyeonggi Min)

WORK IN
PROGRESS

The Staggering Adoption of Price Increases on Electric Vehicle Charging Infrastructure (with David Woo)

Endogenous R&D on clean energy technologies in WITCH model (with Elena Verdolini, Lara Aleluia Reis)

Carbon dioxide emissions embodied in international trade (with Elena Verdolini and Laura Bonacorsi)

The impacts of temperature exposures on innovation (with Jiyong Eom)

TEACHING
INTERESTS

Microeconomics, Energy Economics, Energy Policy, Environmental Economics, Environmental Policy, and Econometric Policy Evaluation

TEACHING
EXPERIENCE

KDI School of Public Policy and Management, Sejong, South Korea

- K-Water capstone project 02/2024
- Seminar on Global Policies 02/2024
- Climate Change Economics and Policy 09/2023
- Environmental Economics and Policy 09/2023
- Global Energy Policy 2023-2024

- Environmental and Climate Change Policy 06/2023
- Technological Change and the Environment 2023-2024
- Environmental and Climate Change Policy 09/2022

College of Business, KAIST, Seoul, South Korea

- Studies on Green Growth Strategies 03/2024
- Energy Industry and R&D 09/2023
- STAT Prep 08/2022
- STAT Prep/Environmental and Energy Data Analysis 08/2020

Georgia Institute of Technology, Atlanta, GA

- Math and Stat Summer Prep 08/2016

Teaching Assistant

- PUBP8211: Microeconomics for Public Policy (Dr. Matej Drev) 01/2014-05/2014
- ECON8007: Microeconomics for Public Policy (Dr. Omer Baris) 01/2013-05/2013
- PUBP6116: Microeconomics Policy Analysis (Instructor: Jian Wang) 08/2012-12/2012
- PUBP8211: Microeconomics Theory (Dr. Doug Noonan) 01/2012-05/2012
- POL1101: Government of the U.S. (Dr. Julia Melkers) 08/2011-12/2011

Texas A&M University, College Station, TX

Teaching Assistant

- AGEC440: Agribusiness Strategic Analysis (Dr. Desmond Ng) 09/2010-12/2010
- AGEC314: Marketing Agricultural Products (Dr. S. Dharmasena) 06/2010-08/2010
- AGEC603: Land Economics (Dr. David Newburn) 01/2010-05/2010

FELLOWSHIPS,
SCHOLARSHIPS,
AND AWARDS

- Precourt Fellowship, Stanford Precourt Energy Efficiency Center 2016
- Anne Robinson Clough International Student Fund 2016
- Best Poster Award, Atlanta Conference on Science and Innovation Policy 2015
- National Science Foundation Travel Award (AWARD No. CBET-1539816) 2015
- Sam Nunn Security Program Fellowship, MacArthur Foundation 2014-2015
- Scholarship, Southeast Energy Efficiency Alliance Annual Conference 2014
- Scholarship, Southern Section of Air & Waste Management Association 2012
- National Scholarship in Energy, Ministry of Knowledge and Economy 2009-2011
- Departmental Scholarship, Texas A&M University 2009-2010
- Hanyang University Study Abroad Scholarship 2009

ACADEMIC
PRESENTATIONS

- 2024
 - 42th International Energy Workshop (IEW), Bonn, Germany (Scheduled)
 - European Association of Environmental and Resource Economists (EAERE) 2024, Leuven, Belgium (Scheduled)
 - Korea Energy Modelling Forum (K-EMF), Korea
 - Korea Environmental Economics Conference, Korea
 - Korea Environment Institute, Korea
 - Sookmyung Women's University, Korea
- 2023
 - 40th USAEE/IAEE North American Conference, Chicago, United States
 - 2023 Korea-US Policy Dialogue: Towards Carbon Neutrality, Seoul, Korea (Chair)
 - 17th International Conference on Energy Economics and Technology (ENERDAY), Dresden, Germany
 - Kiel Institute Workshop on the role of public research and innovation measures on mitigating climate change, Germany (Invited)

Korea Environmental Economics Conference, Korea
Graduate-Development Economics Seminar Series, National Graduate Institute for Policy Studies (GRIPS), Japan (Invited)

- 2022

IPCC 6th Assessment Report Workshop by Korea Environment Institute (Invited)
Energy Industrial R&D Policy by KAIST (Invited)
KDI School-World Bank DIME Conference on Impact Evaluation in Sustainable and Inclusive Development
European Climate and Energy Modelling Platform (ECEMP) 2022
Korea Environment Institute (Invited)
Empirical Methods in Environmental Economics Research by Sookmyung Women's University (invited)
GDLN Blended learning program: Climate Change Mitigation by KDIS and BLS (invited)
European Association of Environmental and Resource Economists (EAERE) 2022 (by co-author)
40th International Energy Workshop (IEW), Freiburg, Germany
Berlin School of Economics (BSE) workshop on the Effectiveness and Distributional Impacts of Environmental Policy (by co-author)
Sustainability and Development Conference 2022 (University of Michigan)

- 2021

2021 Annual SEEDS (Sustainability, Environmental Economics and Dynamics Studies) Workshop
13th Korea Energy Modelling Forum (K-EMF)
26th Annual Conference of the European Association of Environmental and Resource Economists
Spatial Data Science Laboratory, University of Seoul (Invited)
IEA Workshop on R&D Data Collection and Mission Innovation Ministerial Side Event on Increasing the Efficiency of R&D Policies through Data and Analyses (Invited)
Mission Innovation Tracking Progress Workshop: Tracking Clean Energy Innovation Performance through Patent Indicators (Invited)
Laboratory for Sustainable Economy and Policy, Graduate School of Environmental Studies, Seoul National University (Invited)
9th Annual Conference of the Italian Association of Environmental and Resource Economists, Italy
IRENA Invitation to the closed-door expert workshop, Tracking Innovation Impacts (Exploring the impacts of innovation on offshore wind) (Invited)
Korea Energy Society, Seoul, South Korea (Invited)
Green Technology Center (GTC), Seoul, South Korea (Invited)
Graduate School of Science and Technology Policy, KAIST, Daejeon, South Korea (Invited)
KAIST College of Business, KAIST, Seoul, South Korea (Invited)

- 2020

Thirteenth Integrated Assessment Modeling Consortium (IAMC) Annual Meeting 2020
CLOSED-DOOR EXPERT WORKSHOP Tracking Energy Innovation Impacts Framework (TEIIF), IRENA (Invited)
Korea Energy Economics Institute (KEEI), Ulsan, South Korea (Invited)
Yonsei University, Seoul, South Korea (Invited speaker)
Korea Institute of Energy Technology Evaluation and Planning (KETEP), Seoul, South Korea (Invited)
4th Korea Energy Modelling Forum (K-EMF)
25th Annual Conference of the European Association of Environmental and Resource Economists
Graduate School of Technology & Innovation Management, Hanyang University, Seoul, South Korea (Invited)

Exploring National and Global Actions to reduce Greenhouse gas Emissions (ENGAGE) project meeting
Eighth Annual Conference of the Italian Association of Environmental and Resource Economists, Brescia, Italy

- 2019

Climate and Energy Policy & Strategy Research Group, KAIST College of Business, Seoul, South Korea (Invited))
INNOPATHS project meeting, Potsdam Institute for Climate Impact Research (PIK), Potsdam, Germany
Exploring National and Global Actions to reduce Greenhouse gas Emissions (ENGAGE) kick-off meeting, IIASA, Vienna, Austria
1st Workshop on Climate Economics, Innovation, and Policy: The Economics of Environmental Policy and Innovation, Ottawa, ON Canada (Hosted by Dr. Carolyn Fischer: Canada 150 Chair — Climate Economics, Innovation, and Policy)
EAERE-FEEM European Summer School in Resource and Environmental Economics: Econometric Approaches for Environmental Policy Evaluation, Venice, Italy
24th Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Manchester, U.K.
SET-NAV Final Conference, Brussels, Belgium

- 2018

IEA Innovation Team Meeting, International Energy Agency, Paris, France
Energy Modelling Platform for Europe (EMP-E) 2018, Brussels, Belgium
SET-Nav Internal Consortium Meeting, National Technical University of Athens, Athens, Greece
6th World Congress of Environmental and Resource Economists(WCERE 2018), Gothenburg, Sweden
41st International Association for Energy Economics(IAEE) Conference, Groningen, the Netherlands
Enhancing Data Collection on Government and Private Sector Spending for Clean Energy Research and Innovation(Workshop organised in the context of tracking progress in Mission Innovation), Malmo, Sweden
SET-Nav Internal Consortium Meeting, Comillas Pontifical University, Madrid, Spain
Innovation Indicators to Track Progress of Mission Innovation Workshop, Brussels, Belgium

- 2017

SET-Nav Internal Consortium Meeting, DIW Berlin, Berlin
Tyndall Assembly Day, Newcastle University, UK
International Association for Energy Economics(IAEE) European Conference, Vienna, Austria
23rd Annual Conference of the European Association of Environmental and Resource Economists (EAERE), Athens, Greece
Doctoral seminar IAEE international conference (The Economics of Electricity Market), Groningen, the Netherlands
Colorado Technology Primer for Economists and Social Scientists(Summer School on the Electricity Grid), Golden, CO (Sloan Foundation)
The Centre on Innovation and Energy Demand (CIED) Summer School, University of Sussex, UK
9th Annual Alliance for Research on Corporate Sustainability (ARCS) Research Conference, Rotterdam School of Management (RSM), the Netherlands
SET-Nav Internal Consortium Meeting, ETH Zurich, Swiss
International Forum on Disruptive Low Carbon Innovations, London, UK

- 2016
 - Association for Public Policy Analysis & Management Research Conference, Washington, DC
 - Grantham Research Institute on Climate Change and the Environment, London, U.K.
 - ETH Academy on Sustainability and Technology 2016, ETH Zurich, Swiss
 - 2016 Behavior, Energy and Climate Change (BECC) Conference, Baltimore, MD
 - Workshops on Original Policy Research (WOPR), Atlanta, GA
 - Energy Expo Georgia Tech, Atlanta, GA
 - Energy Chat: Georgia Tech Energy Club, Atlanta, GA
- 2015
 - Society for Risk Analysis 2015 Annual Meeting, Washington, DC
 - Association for Public Policy Analysis & Management Research Conference, Miami, FL
 - Atlanta Conference on Science, Technology and Innovation Policy, Atlanta, GA
 - International Symposium on Sustainable Systems and Technologies, Dearborn, MI
 - 56th Annual Transportation Research Forum, Atlanta, GA
- -2015
 - Guest Speaker of the PUBP 6201(Public Policy Analysis: Dr. Marilyn Brown) titled Treatment of Uncertainties with Monte, Atlanta, GA
 - Air &Waste Management Association (A&WMA) Annual Meeting and Technical Conference, Biloxi, MS

STUDENT
MENTORING &
ADVISING

Trudie Dockerty, Thanh Doan, and Rhosanna Jenkins (University of East Anglia, Norwich, U.K.)

Minwoo Hyun (KAIST & University of California - Santa Barbara)

Donghyun Choi (KAIST & Georgia Institute of Technology)

Jintae Kim (KAIST & Seoul National University)

Moonwon Soh (University of Florida)

Daewu Ju (City, University of London)

Kyonggi Min, David Woo (KDI School)

Eugene Kim, Soo Yeon Lee, June Oh, Marian Freyja Gegato Gilo, Seong Uk Hong, Cheyeong Lee (KDI School)

MILITARY SERVICE *Military Service, Auxiliary Police Officer, South Korea*

2002-2004

ACADEMIC
SERVICES

Guest Editor: PLOS ONE

Reviewer: Renewable & Sustainable Energy Transition; Climatic Change; Energy Economics; The Energy Journal; Environmental Research Letters; Energy Efficiency; Energy Policy; Economics of Innovation and New Technology; Environment, Development and Sustainability; Transportation Research Part D: Transport and Environment; Journal of Cleaner Production; International Journal of Environmental Research and Public Health; Renewable & Sustainable Energy Reviews; Journal of Energy Engineering, Energy Research & Social Science

DRUID Conference; AERE 2023 Summer Conference Reviewers; Expert Review of the First and Second Order Draft of the Working Group III (WGIII) Contribution to the IPCC Sixth

Assessment Report (AR6), ACEEE Summer Study on Energy Efficiency in Buildings; Annual Alliance for Research on Corporate Sustainability (ARCS) Research Conference; Proceedings of ISSST(International Symposium on Sustainable Systems and Technologies); Mandela Washington Fellowship

FUNDING AND
GRANTS

KDI School of Public Policy and Management Research Funding (PI)

Brain Pool (Developing an Empirical Model for Electric Vehicle Charging Station Site Selection) by National Research Foundation of Korea (PI)

PROFESSIONAL
MEMBERSHIPS

- American Economic Association (AEA)
- The European Association of Environmental and Resource Economists (EAERE)
- Association of Public Policy Analysis and Management (APPAM)
- The International Association for Energy Economics (IAEE)
- Italian Association of Environmental and Resource Economists (IAERE)

REFERENCES
AVAILABLE TO
CONTACT

Dr. Marilyn A. Brown, Ph.D. Advisor

(e-mail: Marilyn.Brown@pubpolicy.gatech.edu)

- Regents' and Brook Byers Professor, Climate and Energy Policy Laboratory, Georgia Institute of Technology
- D.M. Smith Building, 685 Cherry Street, Room 312, Atlanta, GA 30332

Dr. Elena Verdolini

(e-mail: elena.verdolin@eiee.org)

- Senior Scientist & Professor at the Università degli Studi di Brescia, RFF-CMCC European Institute on Economics and the Environment (EIEE),
- Via Bergognone, 34, 20144 Milano (MI), Italy

Dr. Charlie Wilson

(e-mail: charlie.wilson@eci.ox.ac.uk)

- Professor, Professor of Energy and Climate Change at the Environmental Change Institute, School of Geography and the Environment, and Jackson Senior Research Fellow at Oriel College,
- Oxford University Centre for the Environment, University of Oxford, South Parks Road, Oxford, OX1 3QY, United Kingdom