Dr. Yeong Jae Kim

| Contact Information | KDI School of Public Policy and Management 263 Namsejong-Ro Sejong-Si, 30149 Republic of Korea Office: 318 Phone: 82-44-550-1192 <i>E-mail:</i> kyj@kdischool.ac.kr <i>Website:</i> http://www.kimyj.com Last updated: January 2023 | |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| PROFESSIONAL EXPERIENCE | Associate Professor KDI School of Public Policy and Management | 01/2023 - Present |
| | Assistant Professor KDI School of Public Policy and Management | 08/2022 - 12/2022 |
| | Affiliated Scientist RFF-CMCC European Institute on Economics and the Environme | 08/2022 - Present nt (EIEE) |
| | Junior Scientist RFF-CMCC European Institute on Economics and the Environmen A research institute co-founded by Resources for the Future (RFF) an dation – Euro-Mediterranean Center on Climate Change (CMCC) | |
| | 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) 05/2017 (Dr. Marilyn Brown, Kaye Husbands Fealing, Erik Johnson, and Pat McCarthy) | |
| | M.S., Texas A&M University, Agricultural Economics | 08/2011 |
| | B.S., Hanyang University, Seoul, South Korea, Mechanical Engineering | g 02/2007 |
| | Exchange Student, University of Texas at Austin, Mechanical Engineeri | ng 08/2005-08/2006 |
| Research Interests | Environmental and Energy Economics, Economics of Innovation, Behavior plied Microeconometrics, and Program Evaluation | oral Economics, Ap- |

PEER REVIEWED ARTICLES

- 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
- [2] 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
- [3] Kim, Y. J., Cho, S.-H., & Sharma, B. P. (2021). Constructing efficient portfolios of lowcarbon technologies. *Renewable and Sustainable Energy Reviews*, 150, 111515. https://doi.org/10.1016/j.rser.2021.111515
- [4] 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
- [5] 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
- [6] 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
- [7] 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
- [8] 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
- [9] 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 Klochikin and Kaye Husbands Fealing)

| UNDER REVIEW | The air quality effects of Uber (with Luis Sarmiento) | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| | Local and Global Experience Curves for Lumpy and Granular I Korea (with Donghyun Choi) | Energy Technologies in |
| | Feasibility trade-offs in decarbonisation of power sector with his case of Korea (with Jiyong Eom, Minwoo Hyun, Jessica Jewell, and | - |
| | International and intertemporal knowledge spillovers in carbon-free a nologies (with Elena Verdolini) | nd carbon-efficient tech- |
| | Generalisable technology-specific indicators for analysing energy tec tems | hnology innovation sys- |
| | How open are African inventors? Open green technologies and pater (with Maruf Sanni) | nting activities in Africa |
| | Responsiveness of scientific research systems to covid-19 pandemic: country-level (with Taehyun Jung) | an empirical study at the |
| | Green Growth Policy Inputs and Outputs: A Machine-Aided Analysis Kyle Herman, Soheil Shayegh, and Jun Xiang) | s of G-7 Countries (with |
| | Is the discovery of oil a blessing or curse in the era of climate change? | (with Seong-Hoon Cho) |
| WORK IN | Digitalization signal and corporate valuation (with Francesco Granella | and Soheil Shayegh) |
| Progress | Cross-sectoral spillovers of clean energy technologies (with Elena Verd and Leonidas Paroussos) | olini, Panagiotis Fragkos, |
| | Endogenous R&D on clean energy technologies in WITCH model (wa Aleluia Reis) | ith Elena Verdolini, Lara |
| | The effects of technological diversification and international collaboration vation in Africa (with Maruf Sanni) | tion on low-carbon inno- |
| | Electricity awareness, peer effects, and the adoption of energy efficient (with Jungbae Lee) | ent lighting technologies |
| | Carbon dioxide emissions embodied in international trade (with Ele Bonacorsi) | ena Verdolini and Laura |
| | The impacts of temperature exposures on innovation (with Jiyong Eon | n) |
| | The impacts of forest fire on environmental voting behaviors (with Ky | onggi Min) |
| Teaching Interests | Microeconomics, Energy Economics, Energy Policy, Environmental Economics, Environ- mental Policy, and Econometric Policy Evaluation | |
| Teaching Experience | KDI School of Public Policy and Management, Sejong, South Korea Climate Change Economics and Policy Environmental Economics and Policy Global Energy Policy Environmental and Climate Change Policy Technological Change and the Environment Environmental and Climate Change Policy | a 09/2023 (Scheduled) 09/2023 (Scheduled) 06/2023 (Scheduled) 06/2023 (Scheduled) 02/2023 (Scheduled) 09/2022 |
| | Graduate School of Green Growth, KAIST, Seoul, South Korea STAT Prep | 08/2022 |

| | STAT Prep/Environmental and Energy Data Analysis | 08/2020 | |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|
| | Georgia Institute of Technology, Atlanta, GAMath and Stat Summer Prep | 08/2016 | |
| | Teaching Assistant PUBP8211: Microeconomics for Public Policy (Dr. Matej Drev) ECON8007: Microeconomics for Public Policy (Dr. Omer Baris) PUBP6116: Microeconomics Policy Analysis (Instructor: Jian Wang) PUBP8211: Microeconomics Theory (Dr. Doug Noonan) POL1101: Government of the U.S. (Dr. Julia Melkers) | 01/2014-05/2014 01/2013-05/2013 08/2012-12/2012 01/2012-05/2012 08/2011-12/2011 | |
| | Texas A&M University, College Station, TX | | |
| | Teaching Assistant | | |
| | AGEC440: Agribusiness Strategic Analysis (Dr. Desmond Ng) AGEC314: Marketing Agricultural Products (Dr. S. Dharmasena) AGEC603: Land Economics (Dr. David Newburn) | 09/2010-12/2010 06/2010-08/2010 01/2010-05/2010 | |
| Fellowships, Scholarships, and Awards | Precourt Fellowship, Stanford Precourt Energy Efficiency Center Anne Robinson Clough International Student Fund Best Poster Award, Atlanta Conference on Science and Innovation Police National Science Foundation Travel Award (AWARD No. CBET-15398 Sam Nunn Security Program Fellowship, MacArthur Foundation Scholarship, Southeast Energy Efficiency Alliance Annual Conference Scholarship, Southern Section of Air &Waste Management Association National Scholarship in Energy, Ministry of Knowledge and Economy Departmental Scholarship, Texas A&M University Hanyang University Study Abroad Scholarship | • | |
| Academic Presentations | • 2023 Western Economic Association meetings, San Diego, California (Scheduled) Graduate-Development Economics Seminar Series, National Graduate Institute for Policy Studies (GRIPS) in Japan (Invited: Scheduled) | | |
| | 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 (Inviteds)

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) | | |
| | Kyonggi Min (KDI School) | | |
| | Eugene Kim, Soo Yeon Lee, June Oh, Marian Freyja Gegato Gilo, Seong Uk Hong, Cheyeong Lee (KDI School) | | |
| MILITARY SERVIC | E Military Service, Auxiliary Police Officer, South Korea 2002-2004 | | |
| Academic Services | Guest Editor: PLOS ONE | | |
| | Reviewer: 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; Sustainability | | |
| | Expert Review of the First and Second Order Draft of the Working Group III (WGIII) Con- tribution 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 Sys- tems and Technologies); Mandela Washington Fellowship | | |
| Funding and Grants | Effects of fuel switching on electricity consumption and greenhouse gas emissions after the Russia–Ukraine War at KDI School of Public Policy and Management (PI: 15 Million KRW) | | |
| | Pyeongtaek Business Agency (PI: 20 Million KRW) | | |
| 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 Universita 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

Dr. Seong-Hoon Cho

(e-mail: scho9@utk.edu)

- Professor, Department of Agricultural and Resource Economics, University of Tennessee, Knoxville
- 314A Morgan Hall, Knoxville, TN 37996-451

Dr. Jiyong Eom

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- Associate Professor, Graduate School of Management, KAIST
- 85 Hoegiro Dongdaemoon-Gu Seoul 130-722 Korea