JUNGMIN LIM

Ph.D, Associate Professor and Chair of the Department of Economics Pukyong National University

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PROFESSIONAL SUMMARY

- A climate change and energy economist with diverse experience in policy evaluation and empirical analysis. Currently serves as an assistant professor and chair of the Department of Economics at Pukyung National University. Earned a Ph.D. in Agricultural, Food, and Resource Economics from Michigan State University in 2018. Research focuses on the economic analysis of climate and energy policies, including Emissions Trading Schemes (ETS), as well as the empirical assessment of climate change and disaster impacts and policy effectiveness.
- Research experience includes serving as a Research Assistant (2012–2018) at MSU, a Postdoctoral Associate Researcher in State and Local Government Finance and Policy at the Rural Development Center (2018–2019), and a Research Fellow in the Climate Change Policy Research Team at the Korea Energy Economics Institute (2019–2021). Currently leads a 3-year NRF-funded research project on sustainable energy systems and policy for carbon neutrality as the director of research.
- Beyond academia, has contributed to international climate policy as a government delegate advisor to the UNFCCC (2019–2020) and an expert reviewer for the IPCC 6th Assessment Report WGIII (2020–2022). Actively participates in key government committees on climate and energy policy, including the Deliberation Committee on Determinations of Allocation (2021–2024) and the Emissions Certification Committee (2024–present) of the Korean ETS, as well as the Expert Committee on Energy Policy (2024–present).

EDUCATION

M.S. & Ph. D. Agricultural, Food & Resource Economics

Aug. 2018

Michigan State University, East Lansing, MI. Overall GPA: 3.97/4.0

Ph.D. Field: Environmental and Resource Economics

Advisor: Mark Skidmore

B.A. Agricultural Economics

Feb. 2010

Seoul National University, Seoul, South Korea. Overall GPA: 3.72/4.3

PROFESSIONAL EXPERIENCE

Chair of the Department of Economics

Department of Economics, Pukyung National University

Jan. 2024 – present

Lead the Department of Economics, overseeing academic programs and curriculum development, managing budget and resources, and fostering collaborations with industry, government, and research institutions to enhance research and funding opportunities.

Associate Professor

Sep. 2025 - present

Assistant Professor

Mar. 2021 – Aug. 2025

Department of Economics, Pukyung National University

Teach undergraduate and graduate courses in Microeconomics, Empirical Econometrics, Public Economics, Economics of Climate Change, and Environmental & Resource Economics. Lead a three-year, NRF-funded research project on sustainable energy systems and policy for carbon neutrality as director of research. Advise graduate students on research and thesis development.

Research Fellow

Korea Energy Economics Institute, Climate Change Policy Research Team Sep. 2019 – Feb. 2021

Conducted policy research on greenhouse gas reduction and carbon neutrality policy. Provided policy recommendations for the Korean government's climate and energy policies.

Post-Doctoral Research Associate

North Central Regional Center for Rural Development (NCRCRD)

Sep. 2018 – Aug. 2019

Major duties include: conducting research and preparing refereed journal articles, writing policy briefs, and developing grant proposals with a focus on enhancing community resilience to natural disasters and other types of climate shocks.

Graduate Research Assistant at MSU

Aug. 2012 – Aug. 2018

Assisted Dr. Mark Skidmore (Morris Chair) and the North Central Regional Center for Rural Development. Major position responsibilities include: data collection and analysis on government finance, socio-economic indicators, and severe weather events (U.S. Census, NOAA). Contributed to NSF RAPID-funded disaster impact research and co-authored studies on manufactured home demand and tax policy effects.

Research Assistant at Korea Rural Economic Institute

Feb. 2010 – Dec. 2010

Worked for the Agricultural Trade Team and assisted in research projects related to the trade agreement, such as FTA and DDA. Major projects included an economic analysis of the non-tariff measures of agri-food products in Korea, and a comparative analysis on the DDA negotiations on the forestry area and study for improving a subsidy.

PEER REVIEWED JOURNAL ARTICLES

- **Lim, J.,** S. Lee, T. Jin, and T. Lee (2025). Carbon mitigation potential of power to gas (P2G) for the industrial sector in South Korea combining top-down and bottom-up approach. *International Journal of Hydrogen Energy*, 167, 150905.
- **Lim, J.** and M. Skidmore. (2025). "Natural Disasters: Impacts and Recovery." In the *Oxford Research Encyclopedia of Economics and Finance*. Oxford University Press.
- **Lim, J.** (2025). "Climate factors and tourism-leisure demand: differentiated effects by activity type", *Journal of Climate Change Research*, 16(2), 227~241
- **Lim, J.**, S. Lee, J. Lee, and D. Kim (2025). "Impact of Allocation Policy Changes in Korea's ETS on the Power Sector Permit Allocation and Electricity Market", *Environmental and Resource Economics Review*, *34*(1), 79-126.
- **Lim, J.**, M. Skidmore, and Y. Shen. (2025). "Natural Disasters and their Impact on Cities". In *Oxford Bibliographies in Urban Studies*. Ed. Richardson Dilworth. New York: Oxford University Press. doi: 10.1093/obo/9780190922481-0014.
- **Lim**, **J.** (2024). "Impacts of allocation policy changes and future carbon price on Korea's emissions trading scheme", *Journal of Climate Change Research*, 15(5-1), 757-771
- Luo, Z. and **J. Lim** (2024). "Long-term CO₂ Emissions in China The Role of Development Pathway, Energy Transition, and Demographic Change", *Journal of Northeast Asian Economic Studies*, 36(3).
- Huang Z., **J. Lim**, and M. Skidmore (2024). "The Impacts of Heat and Air Pollution on Mortality in the United States", *Weather, Climate, and Society, 16(2),* 275-301. doi: 10.1175/WCAS-D-23-0001.1
- Li, Y and **J. Lim** (2024). "Spatial impacts of digital industry development on carbon emission intensity: Empirical evidence from China", *Journal of Climate Change Research*, 15(2), 163-176.
- Chang, M., Z. Luo, and **J. Lim** (2024). "Impact of Economic Agglomeration on Carbon Emission Intensity in China—A Spatial Analysis Using Provincial Panel Data", *The Studies of Regional Development*, 56(1), 1-27
- Luo, Z. and **J. Lim** (2024). "An Empirical Analysis on Emissions Reduction Effect and Main Reduction Drivers of China's Carbon Emissions Trading Pilot", *Journal of Climate Change Research*
- Luo, Z. and **J. Lim** (2023). "The Nonlinear Effect of Population Aging and Socio-economic Conditions on Carbon Emission: An Empirical Analysis of 30 Provinces and Regions in China", *Journal of the Korean Data Analysis Society*
- **Lim, J.** and D. Kim (2021). "A Study on Korea's Remaining GHG Emissions Allowance and Capped-Emissions Trajectories under the Paris Agreement Goal", *Journal of Climate Change Research*
- **Lim, J.** (2021). "Estimating the Cost of Emission Reductions by Analyzing Clean Development Mechanism Projects in Peru", *Journal of Climate Change Research*
- Skidmore, M. and **J. Lim** (2020). "Natural Disasters and their Impact on Cities". In *Oxford Bibliographies in Urban Studies*. Ed. Richardson Dilworth. New York: Oxford University Press

- **Lim, J.** and M. Skidmore (2020). "Heat Vulnerability and Heat Island Mitigation in the United States", *Atmosphere*, 11(6), 558. doi.org/10.3390/atmos11060558.
- **Lim, J.** and M. Skidmore (2019). "Flood Fatalities in the United States: The Roles of Socioeconomic Factors and the National Flood Insurance Program." *Southern Economic Journal*, 85(4), 1032–1057. doi.org/10.1002/soej.12330.
- **Lim, J.**, Loveridge, S., Shupp, R., & Skidmore, M. (2017). "Double Danger in the Double Wide: Dimensions of Poverty, Housing Quality and Tornado Impacts." *Regional Science and Urban Economics*, 65, 1-15. doi: 10.1016/j.regsciurbeco.2017.04.003
- Shupp, R., Loveridge, S., Skidmore, M., **Lim, J.**, & Rogers, C. (2017). "Risk, Loss, and Ambiguity Aversion after a Natural Disaster." *Economics of Disasters and Climate Change*, *I*(2), 121-142. doi: 10.1007/s41885-017-0013-2
- Shupp, R., Loveridge, S., Skidmore, M., Lim, J., & Rogers, C. (2017) "Trust and Patience after a Tornado." *Weather, Climate, and Society* 9(4), 659-668. doi: 10.1175/WCAS-D-16-0135.1

OTHER ACADEMIC AND RESEARCH PUBLICATIONS

- Lim, J. (2024). "International Reduction Project and Marginal Abatement Cost" Chapter 2 in (eds.) International Greenhouse Gas Reduction Project: 22 Experts Answer for Climate Crisis Response and Carbon Neutrality
- Lee, T., S. Lee, and **J. Lim.** (2022). Assessment of Carbon Neutrality Potentials from Sector Coupling, Korea Energy Economics Institute Research Report 2022-05.
- Kim, G., D. Noh, J. Lee, and **J. Lim.** (2022). Study on Establishing a Framework for the Biennial Transparency Report (BTR) in the Energy Sector under the Paris Agreement (2/3). Korea Energy Economics Institute Research Report 2022-21.
- Noh, D., S. Kim, J. Lee, and **J. Lim.** (2021). Study on Establishing a Framework for the Biennial Transparency Report (BTR) in the Energy Sector under the Paris Agreement (1/3) focusing on Korean Energy Sector. Korea Energy Economics Institute Research Report 21-22.
- **Lim. J.** and D. Kim. (2020). An Analysis of the Korea's Burden Sharing in Greenhouse Gas Reduction from the view of the Top-down Emission Allowances, Korea Energy Economics Institute, Research Report 20-04.
- Son, I., D. Kim, J. Lim, S. Kim, J. Kim. (2019). Implications of the Paris Agreement Rulebook for the Implementation of Korea Mitigation Policies. Research Report 19-06.
- **Lim, J.** and M. Skidmore. (2019). "Disaster Risk and Policies in the United States." *Lincoln Institute of Land Policy*.
- **Lim, J.**, M. Skidmore, and W. Dyar. (2018). "The Role of Manufactured Homes in Meeting Rural Housing Needs." *Rural Connections, Spring 2018*, 13-16.
- Dyar, W., J. Lim, and M. Skidmore. (2017). "Manufactured Home Living Across Rural America."

Chapter 10 in Albrecht, Don, Scott Loveridge, Stephan Goetz, and Rachel Welborn, (eds.) *Rural Housing and Economic Development*. London: Routledge.

WORKS IN PROGRESS

J. Lim, SJ Lee, TY. Jin and DW. Kim. "Impact of changes of allocation and price in emission trading scheme on the electricity market: Korean case study". *Under Review*

Lim, **J.** "Long-Term Projections of Climate Change Impacts on South Korea's Tourism Demand and Industry: A Climate-Socioeconomic Scenario Analysis". Working paper.

Lim, J., GH. Kim, and JH. Kim. "The Economics of Energy-Saving Behavior: Incentives, Awareness, and Policy Design". Working paper.

Luo, Z. and J. Lim. "Spillover Effects of Emissions Trading Scheme (ETS) Policies". Working paper.

Lim, **J.** and Z. Luo. "Does the Emissions Trading Scheme Effectively Reduce Carbon Emissions? A Synthetic Control Method Approach". Working paper.

JH. Kim, **J. Lim**. "Decarbonizing Manufacturing in South Korea: The Role of Electrification and Energy Efficiency", Working paper.

Luo, Z. and **J. Lim.** "Digital Transformation and Its Carbon Reduction Effects: The Role of Energy Intensity in China". Working paper

Lim, J. and M. Skidmore. "Environmental Quality and Heat Fatalities: An Interplay among Urbanization, Air Quality, and Heat Island Reduction Measures." Working paper.

PROFESSIONAL SERVICE

Committee Member, Korean Resource Economics Association. (2025-present)

Editorial Board Member, *The Studies of Regional Development*. (2024-present)

Editorial Board Member, Korea Energy Economic Review. (2023-present)

Editorial Board Member, Journal of Climate Change Research. (2021-present)

Expert Committee on Energy Policy, *Ministry of Trade*, *Industry and Energy*. (2024–present)

Member of ETS Emissions Certification Committee, *Ministry of Environment*. (2024–present)

Carbon Neutrality Policy Forum T/F, *Ministry of Trade, Industry and Energy*. (2023–present)

Member of ETS Deliberation Committee on Determinations of Allocation, *Ministry of Environment*. (2021–2024)

Expert reviewer of IPCC 6th Assessment Report WGIII. IPCC. (2020–2023)

National Committee for the IPCC (K-IPCC), Korea Meteorological Administration. (2020–2024)

Government Delegate to the UNFCCC, *Ministry of Trade*, *Industry and Energy*. (2019–2020)

CITED IN MEDIA OUTLETS

Mary Elizabeth Dallas. "Climate Change Could Be Catastrophic for Mobile Homes: Study." U.S. News & World Report, May 9, 2017. (LINK)

Marshall Shepherd. "A New Study Explores the Complexities of Tornadoes, Risk, Poverty, And Housing." Forbes Magazine. May 3, 2017. (LINK)

SKILLS

Language Skills: English (Fluent), Korean (Native)

Wolfram Mathematica Computer Skills: STata, + a b | e a v QGIS

REFERENCES

Mark Skidmore

Morris Chair in State and Local Government Finance and Policy

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Scott Loveridge

Assistant Dean for Faculty Affairs and Development, College of Agriculture & Natural Resources

Professor Emeritus, Department of Agricultural, Food, and Resource Economics

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