

# KYUNGMIN LEE

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## EDUCATION

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<b>PhD</b>	Univesity of Delaware, Energy and Environmental Policy	2024
	Dissertation: “The Impact of Human Behaviors and the Built Environment on Energy Use and Heat in Cities” Committee: Dr. Gregory Dobler (chair), Dr. Kalim Shah, Dr. Thomas Powers, and Dr. Clayton Miller	
<b>MCP</b>	Seoul National University, Environmental Studies	2018
<b>BA</b>	Sungshin Women’s University, Economics	2014

## RESEARCH FOCUS

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Energy and Electricity Policy, Global Climate Policy, Community Development and Urban Policy, Data Science, Machine Learning, Computer Vision, Remote Sensing

## PUBLICATIONS

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### *Publications*

\* -Indicate lead author/mentor publicatoin

1. Arjunan, P., Dobler, G., **Lee, K.**, Miller, C., Biljecki, F., & Poolla, K. (2021, November). Operational characteristics of residential air conditioners with temporally granular remote thermographic imaging. In *Proceedings of the 8th ACM international conference on systems for energy-efficient buildings, cities, and transportation* (pp. 184-187).
2. \* **Lee, K.**, & Yun, S. (2018). Positive Effects and Problematic Conditions of Adopting the Benefit Sharing Mechanism in Renewable Energy Projects: Focusing on the Case of Onshore Wind Farms in Jeju Island. *Space & Environment: Vol.65.* (pp.227~270). doi: 10.19097/kaser.2018.28.3.227
  - Featured in the *Monthly Electrical Technology & Information* 2019 January

### ***Policy Reports***

1. Cho, H., Lim, Y., Kim, S., Jeong, H., & **Lee, K.** (2019) Technical Assistance for the Development of an Urban Adaptation Plan for Kurunegala Project, D4.1 Report on the Results of Climate Change Risk and Vulnerability Assessment. CTCN Requests No. 2018000009 Vol 3.
2. Cho, H., Rubio, C., Jeong, H., **Lee, K.**, & Odawa, S. (2019) Technical Assistance for the Development of an Urban Adaptation Plan for Kurunegala Project, D4.2 Climate Change Risk Assessment Guidelines. CTCN Requests No. 2018000009 Vol 4.
3. Kim, G., & **Lee, K.** (2016). A Comparative Study of Humanitarian Programs for Climate Refugees. Energy Climate Policy Institute. *ENERZINE FOCUS*: Vol.69
4. Kim, T., Maeng, J., Park, J., & **Lee, K.** (2014). A Study on Environmental Assessment Guideline for Site Selection of Offshore Wind Farm Project. Sejong: *Korea Environment Institute*.

### **PRESENTATIONS AND INVITED LECTURES**

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#### **Paper Presentation**

“An Exploratory Study on Carbon Neutrality Monitoring Models and Scenarios for the Establishment of a Sustainability Assessment System: A Comparison of Korea and Countries Enacted Legally Binding Agreements,” The 4<sup>th</sup> Environmental Research Forum. Korea Safety, Health, and Environment Foundation, 2022, November.

“An Influence of the Benefit Sharing Mechanism to the Local Acceptance and Environmental Awareness: Focusing on the Case of Onshore Wind Farms in Jeju Island,” The 2nd International conference on Bio-resources, Energy, Environment, and Materials Technology, 2018, June.

“An Exploratory Study on Positive Effects of and Problematic Conditions of adopting the Benefit Sharing Mechanism: Focusing on the Case of Onshore Wind Farms in Jeju Island,” Spring Session of the Korea Environmental Policy and Administration Society Conference, 2018, February.

“A Study on Impacts from Price Subsidy and Tax Policy of EVs in South Korea,” 2016 International Conference on Climate Change and Sustainable Innovation of Korea Environmental Economics Association, 2016, June.

#### **Invited Lecture**

“Data-Driven Policy Making For Disaster Management, Department of Public Administration”, Chungnam National University, 2023, April.

“Overview of Data Science and Machine Learning Tools in Energy and Environmental Policy Field, Department of Public Administration”, Chungnam National University, 2021, November.

“A Case Study of Machine Learning Applications in Energy and Environmental Policy”, Department of Public Administration, Chungnam National University, 2020, October.

### **Symposium**

“Extraction of Air Conditioner Unit Indicators from Proximal Infrared Remote Sensing of Buildings,” UD Data Science Symposium, 2021, November.

### **Keynote Address**

“An Exploratory Study on Carbon Neutrality Monitoring and Scenario Evaluation: Comparative Analysis of Korea and Countries that Enacted Carbon Neutrality,” 2022, Debriefing Conference, 2022, November.

## **HONORS AND AWARDS**

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### ***Research Fellowships***

UD Doctoral Fellowship for Excellence (\$2,444-2,528/month), 2023 – 2024

UD Summer Doctoral Fellowship (\$4,500), 2022

### ***Research Grants/Awards***

Korea Safety, Health, and Environment Foundation - Environmental Research Forum Excellence Research Award (\$250), 2022

Korea Energy Climate Policy Institute - Research Grant Program Competition Grant (\$1,550), 2015

### ***Honors***

Aspen Institute - Future Leaders Climate Summit Cohort (Travel Award), 2022

Ministry of Environment of Korea - Global Environmental Leaders Program Fellowship, (~\$6,000), 2017

Korea Meteorological Administration - International Meteorological Expert Program Fellowship (~\$3600), 2016

Korea National Assembly Climate Change Forum - UNFCCC COP20 Lima Conference Observer (Travel Award), 2014

### ***Academic Distinctions / Scholarships***

University of Delaware - Tuition and Assistantship, 2019 – 2023

Seoul National University - Merit-based/Work-Study Scholarship, 2015 – 2016

Sungshin Women’s University, Merit-based Scholarship, 2011 – 2013

## RESEARCH EXPERIENCE

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<b>University of Delaware</b> , Research Assistant (Dr. Dobler)	Feb2020 - Present
<b>Korea Environment Institute</b> , Researcher	May 2019 – Jun. 2019
<b>Seoul National University</b> , Research Assistant (Dr. Yun)	Sep. 2015 – Aug. 2016
<b>Korea Environment Institute</b> , Research Intern	Apr. 2014 – Dec. 2014

## TEACHING EXPERIENCE

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<b>University of Delaware</b> , U.S.A.	Aug. 2019 – Dec. 2022
<b>Teaching Assistant</b> , <i>Biden School of Public Policy and Administration</i>	

- Taught one or more lectures every semesters and supported discussion sections during lectures
- Graded exams and long essays, and hold regular office hours

### **Crafting Public Policy (UAPP225)**

Teaching lectures:

Non-Governmental Actors: Interest Groups	Spring 2022
Environmental and Energy Policy	Spring 2021
Policy Implementation and Regulatory Rule-Making	Spring 2020

### **Introduction to Energy and Environmental Policy (ENEP250)**

Global Environmental Law and Policy/Climate Policy/Seminar	Fall 2022
Study Team Workshop	Spring 2022
Environmental Law and Policy	Fall 2020

### **Political Economy of the Environment (ENEP410)**

Global Capitalism and the Environment	Fall 2021
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### **Environmental Sustainability: Political and Economic Analysis (ENEP410)**

Global Financing: Climate Change and the Least Developed Countries	Fall 2019
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## WORK EXPERIENCE

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<b>Korea Marine Environment Management Corporation</b> , Specialist	Jun. 2018 – Sep. 2018
<b>United Nations Environment Program (UNEP)</b> , Intern	Mar. 2017-Aug. 2017
<b>United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)-East and North-East Asia Office (ENEA)</b> , Intern	Sep. 2016 – Feb. 2017

## PROFESSIONAL AFFILIATIONS

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**Association for Public Policy Analysis and Management (APPAM)**, Member  
**American Planning Association (APA)**, Member

## SERVICE

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**UD Computational Social Science Association**, Interim President, 2022-2023  
**UD Data Science Institute**, Graduate Fellow, 2021-2023  
**UD Biden School Student Association** Secretary, 2021-2022  
**UD Korean Graduate Student Association** Officer, 2021-2022  
**UD Energy and Environmental Policy Student Association** Alumni Chair, 2020-2021  
**Korean Youth Climate Change Network BIGWAVE**, Steering Committee Member, 2016-2019

## LANGUAGES

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**English:** Fluent, **Korean:** Native

## COMPUTER SKILLS

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**Programming:** *Python*, R, SPSS, ArcGIS