### Cecilia Han Springer

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**EDUCATION** 

Ph.D., Energy and Resources University of California, Berkeley May 2016 - May 2019 (expected)

emversity of Camorina, Berkeley

August 2014 - May 2016

M.S., Energy and Resources University of California, Berkeley

August 2007 - May 2011

B.S., Environmental Science Brown University

 ${\bf PROFESSIONAL}\ {\it Consultant}$ 

August 2017 - Present

**EXPERIENCE** Global Efficiency Intelligence

- Contributed to research on embodied carbon in global trade
- Assessed opportunities for decarbonization in California's cement industry

Research Affiliate

June 2015 - Present

China Energy Group, Lawrence Berkeley National Laboratory

- Led research for a series of reports on emerging energy efficiency technologies for energy-intensive industries
- Provided research assistance on demand response models for China's power sector reform

Senior Associate

August 2012 - August 2014

Climate Advisers, Washington, DC

- Provided qualitative and quantitative research support, strategic guidance, and fundraising assistance for the Climate Advisers project portfolio, spanning global climate, energy, agriculture, and development policy
- Successfully fundraised for and led projects on international development, commodity supply chains in Asia, and electric vehicle life cycle assessment

Fulbright Research Fellow

August 2011 - July 2012

U.S. Department of State, Tianjin, China

- Designed and implemented a field study on the political, environmental and social impacts of urban planning and real estate development in the Sino-Singapore Tianjin Eco-City
- Developed a web platform and network for international research on green urban development in China

FELLOWSHIPS AND GRANTS Pamela and Kenneth Fong Graduate Student Fellowship Center for Chinese Studies, University of California, Berkeley

Awarded June 2018

East Asia and Pacific Summer Institute Fellowship National Science Foundation

Awarded May 2017

Expanding Potential in STEM Diversity Seed Award Synberc, University of California, Berkeley

Awarded May 2015

Systems Approach to Green Energy Fellowship Awarded December 2014 Berkeley Center for Green Chemistry, University of California, Berkeley

Graduate Research Fellowship National Science Foundation

Awarded August 2014

# PEER-REVIEWED

Springer, C., Evans, S., Lin, J., and Roland-Holst, D. (2019). Low Carbon Growth in China: The Role of Emissions Trading in a Transitioning Economy. Applied Energy PUBLICATIONS 235: 1118-1125 (Special issue: Emissions trading systems for global low carbon energy economy transformation).

> Huang, H., Roland-Holst, D., Springer, C., Lin, J., Cai, W., and Wang, C. (2019). Emissions trading systems and social equity: A CGE assessment for China. Applied Energy 235: 1254-1265.

> Moore, F., Rising, J., Lollo, N., Springer, C., Vasquez, V., Dolginow, A., Hope, C., and Anthoff, D. (2018). Mimi-PAGE, an open-source implementation of the PAGE09 integrated assessment model. Nature Scientific Data 5: 180187.

> Springer, C. (2018). Assessing Energy Intensity and Retrofit Opportunities for the Aluminum Industry: Lessons from Vietnam. Resources, Conservation, and Recycling 131: 235-246.

> Caprotti, F., Springer, C., and Harmer, N. (2015). Eco for whom? Envisioning ecourbanism in the Sino-Singapore Tianjin Eco-City, China. International Journal of Urban and Regional Research 39(3): 495-517. (selected as one of the most significant papers of the past 40 years for the 40th Anniversary issue of IJURR, 2017)

> Springer, C., Dere, E., Hall, S. et al. (2012). Rodent thyroid, liver, and fetal testis toxicity of the monoester metabolite of bis-(2-ethylhexyl) tetrabromophthalate (tbph), a novel brominated flame retardant present in indoor dust. Environmental Health Perspectives 120(12): 1711-1719.

> Reviewer: Resources, Conservation, and Recycling; Sustainable Cities and Society; Advances in Climate Change Research; 20th Annual Conference on Global Economic Analysis

#### **BOOK CHAPTERS**

Springer, C. (2018). "Energy Entanglement: New Directions for the China-Indonesia Coal Relationship," in In China's Backvard: Policies and Politics of Chinese Resource Investments in Southeast Asia, Jason Morris-Jung (ed.), Singapore: Institute for Southeast Asian Studies Press.

Purvis, N., Springer, C., and Grausz, S. (2016). "The New U.S. Domestic Climate and Clean Energy Agenda," in The EU, the US, and Global Climate Governance, Christine Bakker and Francesco Francioni (eds.), London: Routledge.

#### WHITE **PAPERS**

Moran, D., Hasanbeigi, A., and Springer, C. (2018). "The Carbon Loophole in Climate Policy: Quantifying the Embodied Carbon in Traded Products." ClimateWorks. Report featured in the New York Times: https://www.nytimes.com/2018/09/04/climate/outsourcin carbon-emissions.html

Springer, C. and Hasanbeigi, A. (2017). "Emerging Energy Efficiency and Carbon Dioxide Emissions-Reduction Technologies for the Glass Industry." Lawrence Berkeley National Laboratory report.

Springer, C. and Hasanbeigi, A. (2016). "Emerging Energy Efficiency and Carbon Dioxide Emissions-Reduction Technologies for Industrial Production of Aluminum." Lawrence Berkeley National Laboratory report (LBNL-1005789).

Roland-Holst, D., Behnke, D., Evans, S., Springer, C., and Heft-Neal, S. (2016). "Senate Bill 350 Study - The Impacts of a Regional ISO-Operated Power Market in California: Economic Impact Analysis." Berkeley Economic Advising and Research, Berkeley, CA.

Purvis, N., Jones, A., and Springer, C. (2014). "Retrofitting Coal-Fired Power Plants in Middle-Income Countries: What Role for the World Bank? The Brookings Institution, Washington, DC.

Springer, C., Ogden, P., Purvis, N., and Dahl-Jorgensen, A. (2014). "Accelerating Global Vehicle Efficiency. Center for American Progress, Washington, DC.

Jones, A., Purvis, N., and Springer, C. (2013). "Trading Up: The Case for an International Carbon Market Reserve to Reduce Volatility at the Limits in 2020 and Beyond." The Brookings Institution, Washington, DC.

Purvis, N., Wolosin, M., and Springer, C. (2013). "Breaking the Link Between Commodities and Climate Change." Climate Advisers, Washington, DC.

## AND PRESEN-**TATIONS**

CONFERENCES Springer, C. "Quantification and Authority in China's Carbon Market Design Process," workshop on Data, Technology, Digitization, and Environmental Governance in China, Freie Universitat Berlin, Hanover, Germany, May 2018.

> Springer, C. "Mining Modernity: Energy Limitations and Efficiency Opportunities in Vietnam's Aluminum Industry," International Association of Energy Economics, Singapore, June 2017.

> Roland-Holst, D., Evans, S., and Springer, C. "Central Asian Regional Modeling Analysis Workshop: Introduction to Computable General Equilibrium Models," Central Asia Regional Economic Cooperation Institute, Almaty, Kazakhstan, December 2016

> Springer, C. "From Investment to Impact: Towards Quantitative Evaluation of Chinese Resource and Infrastructure Finance," Workshop at the Shanghai Institute for International Studies, Shanghai, China, November 2016

> Springer, C. and Gordon, P. "The Data and Diversity Project: From Classroom to Campus," Synberc 2nd Annual Expanding Potential Conference, Berkeley, January 2015

#### **TEACHING**

Graduate Student Instructor, Energy and Society (ER200) University of California, Berkeley

Summer 2016

Facilitator, Data and Diversity (ER199) University of California, Berkeley

Fall 2015

OTHER Visiting Researcher Summer 2017 and Fall 2018 AFFILIATIONS Tsinghua University Institute for Energy, Environment, & Economy, Beijing, China

Visiting Researcher August 2015

Institute of Southeast Asian Studies - Yusof Ishak Institute, Singapore

Student Representative August 2014 - present

Energy and Resources Group Student Diversity Committee

**SKILLS** Programming Languages: R, Julia, GAMS

Languages: Mandarin (advanced), Cantonese (basic)

Martial arts instructor and student