

## **Cecilia Springer, Principal Associate**

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### **PROFESSIONAL EXPERIENCE**

**Synapse Energy Economics, Cambridge, MA. *Principal Associate*, July 2025 - Present.**

- Provides consulting and research, conducts modeling and analysis, and prepares expert reports on issues including industrial decarbonization, carbon and energy policy, strategic electrification, and energy efficiency.

**Global Efficiency Intelligence, LLC. St. Petersburg, FL. *Principal*, 2017–2019, 2023 – July 2025.**

- Advised a wide range of clients, including philanthropies, NGOs, tech companies, apparel brands, and international organizations on decarbonization strategies for industry
- Led research and techno-economic modeling for numerous projects, leading to publications on technologies and policies for decarbonization for steel, cement, aluminum, textiles, pulp and paper, food and beverages, and other sectors
- Served as Co-Director of the Industrial Electrification Center, advancing knowledge on electrification as a decarbonization strategy

**Boston University Global Development Policy Center, Boston, MA. *Assistant Director*, Global China Initiative, 2020–2023.**

- Directed the Global China Initiative, including a team of over a dozen staff, students, and pre- and post-doctoral fellows
- Guided strategy development for internal programs
- Led research, database development, and quantitative modeling as team lead for the energy and climate team within the Global China Initiative
- Managed collaborations with external partners around the world, including universities and NGOs in China, Indonesia, Brazil, South Africa, and other countries.
- Represented the Center in policy and media communications to bring Center research to a wider audience through blogs, press releases, media interviews, stakeholder briefings, and speaking at high-level events
- Currently a Non-Resident Fellow, continuing to provide strategic input and research collaboration

**Climate Advisers, Washington, DC. *Senior Associate*, 2012–2014.**

- Conducted research and managed projects on a wide range of topics, including sustainable agricultural supply chains, electric vehicles, and carbon pricing

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- Founding team member of the Chain Reaction Research project, providing risk assessment for financial institutions interested in their ESG footprints
  - Contributed to advocacy efforts that led to landmark no-deforestation agreements by major agribusinesses

**U.S. Department of State, China. *Fulbright Fellow*, 2011–2012.**

- Conducted research on the Tianjin Eco-City in affiliation with a host research lab at Nankai University
- Participated in collaboration and exchange programs to advance US-China diplomacy

## EDUCATION

**Harvard University**, Cambridge, MA

Postdoctoral Fellow, Belfer Center (Harvard Kennedy School), 2019–2020

**University of California, Berkeley**, Berkeley, CA

MS/PhD in Energy and Resources, 2014–2019

**Brown University**, Providence, RI

BSc in Environmental Science, 2007–2011

## SELECTED PUBLICATIONS

Springer, C., A. Hasanbeigi, and C. Savel. 2025. “Industrial Electrification with Heat Pumps in California, Colorado, and Washington.” *Global Efficiency Intelligence*.

Springer, C., and A. Hasanbeigi. 2025. “Textile Heating Electrification Tool.” *Global Efficiency Intelligence*.

Springer, C., and A. Hasanbeigi. 2025. “Data Centers in the AI Era: Energy and Emissions Impacts in the U.S. and Key States.” *Global Efficiency Intelligence*.

Lu, Y., C. Springer, and B. Steffen. 2024. “Cofinancing and Infrastructure Project Outcomes in Chinese Lending and Overseas Development Finance.” *World Development* 175: 106473.

Springer, C., A. Hasanbeigi, and A. Sibal. 2024. “Electrifying European Industry: Part 2 – Electric Boilers and Industrial Heat Pumps.” *Global Efficiency Intelligence*.

Lewis, J., and C. Springer. 2024. “Opportunities for U.S.-China Engagement on Development Finance for Overseas Renewable Energy.” *Energy and Climate Management* 1.

Springer, C., and A. Hasanbeigi. 2024. “Electrification of Paper Mills in India.” *Global Efficiency Intelligence*.

Springer, C., and K. Zhu. 2023. “A Decade of Environmental Change.” *Global China Pulse* 2, no. 1.

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- Springer, C., K. Tang, C. Nedopil, C. Alden, and C. Van Staden. 2023. "Elevating ESG: Empirical Lessons on Environmental, Social and Governance Implementation of Chinese Projects in Africa." SSRN Scholarly Paper No. 4562949. Social Science Research Network.
- Springer, C. 2022. "China's Withdrawal from Overseas Coal in Context." *World Development Perspectives* 25: 100397.
- Moses, O., L. Gormley, and C. Springer. 2022. "China's Paid-In Capital: Identifying and Analyzing China's Overseas Development Investment Funds." GCI Working Paper No. 025. Boston University Global Development Policy Center.
- Yang, X., Y. Gao, M. Zhu, and C. Springer. 2022. "Assessing Methane Emissions From the Natural Gas Industry: Reviewing the Case of China in a Comparative Framework." *Current Climate Change Reports*: 1–10.
- Xiahou, Q., C. Springer, and R. Mendelsohn. 2022. "The Effect of Foreign Investment on Asian Coal Power Plants." *Energy Economics* 105: 105752.
- Springer, C., L. Ramos, and R. Bhandary. 2022. "Who Funds Overseas Gas Projects? Comparing Development Finance from China and Major Multilateral Development Banks." GEGI Policy Brief No. 20. Boston University Global Development Policy Center.
- Springer, C., S. Evans, and F. Teng. 2021. "An Empirical Analysis of the Environmental Performance of China's Overseas Coal Plants." *Environmental Research Letters* 16(5).
- Springer, C. and D. Shi. 2021. "Sharing Water and Power: China's Hydropower Development in the Mekong Region." In *Essays on the Rise of China and Its Implications*. The Woodrow Wilson International Center for Scholars.
- Springer, C. 2020. "China's National Carbon Market: Paradox and Potential." Harvard Kennedy School Belfer Center for Science and International Affairs.
- Hou, J., X. Deng, C. Springer, and F. Teng. 2020. "A Global Analysis of CO<sub>2</sub> and Non-CO<sub>2</sub> GHG Emissions Embodied in Trade with Belt and Road Initiative Countries." *Ecosystem Health and Sustainability* 6, no. 1: 1761888.
- Springer, C., S. Evans, J. Lin, and D. Roland-Holst. 2019. "Low Carbon Growth in China: The Role of Emissions Trading in a Transitioning Economy." *Applied Energy* 235: 1118–25.
- Moore, F., J. Rising, N. Lollo, C. Springer, V. Vasquez, A. Dolginow, C. Hope, and D. Anthoff. 2018. "Mimi-PAGE, an Open-Source Implementation of the PAGE09 Integrated Assessment Model." *Scientific Data* 5, no. 1: 180187.
- Moran, D., A. Hasanbeigi, and C. Springer. 2018. "The Carbon Loophole in Climate Policy." KGM and Associates, Global Efficiency Intelligence, and ClimateWorks Foundation.
- Springer, C. 2018. "Assessing Energy Intensity and Retrofit Opportunities for the Aluminum Industry: Lessons from Vietnam." *Resources, Conservation and Recycling* 131:235–246.
- Springer, C. and A. Hasanbeigi. 2017. "Emerging Energy Efficiency and Carbon Dioxide Emissions-Reduction Technologies for the Glass Industry." Lawrence Berkeley National Laboratory.
- Springer, C., and A. Hasanbeigi. 2016. "Emerging Energy Efficiency and Carbon Dioxide Emissions-Reduction Technologies for Industrial Production of Aluminum." Lawrence Berkeley National Laboratory.

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Purvis, N., A. Jones, and C. Springer. 2014. "Trading Up: The Case for an International Carbon Market Reduce to Reduce Volatility at the Limits in 2020 and Beyond." The Brookings Institution.

Springer, C., E. Dere, SJ Hall, 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*.

*Resume updated August 2025*