

## Lucy Metz, Research Associate

---

Synapse Energy Economics | 485 Massachusetts Avenue, Suite 3 | Cambridge, MA 02139 | 617-904-9764  
lmetz@synapse-energy.com

### PROFESSIONAL EXPERIENCE

**Synapse Energy Economics Inc.**, Cambridge, MA. *Research Associate*, July 2022 – Present

- Consults on energy-sector issues, including power sector decarbonization, dispatch modeling, state and local climate policy, and industrial emissions

**Laboratory of Dr. Alexander Barron**, Department of Environmental Science and Policy, Smith College, Northampton, MA. *Research Assistant*, June 2020 – May 2022

- Co-authored paper on carbon neutrality initiatives in higher education
- Designed data visualization and analysis for USREP-ReEDS modeling of Clean Air Act policy
- Calculated CO<sub>2</sub> emissions reductions achievable under Massachusetts climate legislation and drafted white paper with results

**Laboratory of Dr. Judith Cardell**, Picker Engineering Program, Smith College, Northampton, MA. *Honors Thesis*, February 2021 – May 2022

- Developed model of New England electric grid in MATLAB for use with Matpower
- Analyzed potential sources of low-carbon dispatchable generation in Massachusetts
- Applied results to state energy policy and examined role of modeling in policymaking process

**Co-Equal**, Washington, D.C. *Policy Intern*, February 2021 – March 2022.

- Performed analysis on a wide range of policy topics requested by members of Congress
- Finalized economic modeling study for public release and presented results
- Coordinated with research team at MIT and Co-Equal to meet policy-relevant deadlines

### EDUCATION

**Smith College**, Northampton, MA

Bachelor of Science in Engineering Science, *Magna Cum Laude with Highest Honors*, 2022

### SKILLS

Computer: R, MATLAB, Igor Pro, Mathematica, Microsoft Office Suite

Languages: Spanish (proficient)

---

## PUBLICATIONS

Knight, P., J. Frost, T. Fitch, E. Sinclair, J. Taberero, O. Griot, B. Havumaki, J. Smith, L. Metz, S. Chavin. 2023. *TVA's Clean Energy Future: Charting a course to decarbonization in the Tennessee Valley*. Synapse Energy Economics for GridLab and Center for Biological Diversity.

Yuan, M., A. Barron, N. Selin, P. Picciano, L. Metz, J. Reilly, and H. Jacoby. 2022. "Meeting U.S. greenhouse gas emissions goals with the international air pollution provision of the Clean Air Act." *Environmental Research Letters* 17 (5): 054019.

Barron, A., M. Domeshek, L. Metz, L. Draucker, and A. Strong. 2021. "Carbon neutrality should not be the end goal: Lessons for institutional climate action from U.S. higher education." *One Earth* 4 (9): 1248–1258.

Longnecker, E., L. Metz, R. Miller, and A. Berke. 2021. "Probing Liquid–Liquid Phase Separation in Secondary Organic Aerosol Mimicking Solutions Using Articulated Straws." *ACS Omega* 6 (49): 33436–33442.

Figuroa, L., M. Blinder, C. Grincavitch, A. Jelinek, E. Mann, L. Merva, L. Metz, A. Zhao, R. Irwin, S. McArt, and L. Adler. 2019. "Bee pathogen transmission dynamics: Deposition, persistence and acquisition on flowers." *Proceedings of the Royal Society B*, 286: 20190603.

*Resume updated March 2023*