

# Lucy Metz, Senior Associate

Synapse Energy Economics I 485 Massachusetts Avenue, Suite 3 I Cambridge, MA 02139 Imetz@synapse-energy.com

## PROFESSIONAL EXPERIENCE

**Synapse Energy Economics Inc.**, Cambridge, MA. *Senior Associate* April 2025 – Present; *Associate* April 2023 – April 2025; *Research Associate*, July 2022 – April 2023.

- Provides expert research, analysis, and deliverables on energy-sector issues, including electric
  utility resource planning and power plant economics, building decarbonization, industrial sector
  emissions, and state and local climate policy
- Supports the development of testimony and comments in integrated resource planning dockets, rate cases, certificates of need, and environmental compliance investment dockets across the country
- Conducts analysis using Synapse's Building Decarbonization Calculator (BDC), a stock turnover model that calculates the emissions and energy impacts of heat pump adoption
- Produces data visualization tools in R, including interactive webtool of U.S. industrial emitters
- Assists with power sector dispatch modeling using EnCompass

**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

**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: Excel, R, EnCompass, MATLAB, Mathematica, ENERGY STAR Portfolio Manager

Languages: Spanish (proficient)

### **TESTIMONY**

Kansas Corporation Commission (Docket No. 25-EKCE-207-PRE): Direct testimony of Lucy Metz in the matter of the Petition of Evergy Kansas Central, Inc., Evergy Kansas South, Inc., and Evergy Metro, Inc. for Determination of the Ratemaking Principles and Treatment that Will Apply to the Recovery in Rates of the Costs to Be Incurred for Certain Electric Generation Facilities under K.S.A. 66-1239. On behalf of Citizens' Utility Ratepayer Board (CURB). March 14, 2025.

**Public Service Commission of Wisconsin (Docket No. 6690-UR-128)**: Surrebuttal testimony of Lucy Metz in the matter of the Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates. On behalf of Sierra Club. September 18, 2024.

**Public Service Commission of Wisconsin (Docket No. 6690-UR-128)**: Direct testimony of Lucy Metz in the matter of the Application of Wisconsin Public Service Corporation for Authority to Adjust Electric and Natural Gas Rates. On behalf of Sierra Club. August 19, 2024.

**Georgia Public Service Commission (Docket No. 55378)**: Direct Testimony of Devi Glick and Lucy Metz in re: Georgia Power Company's 2023 Integrated Resource Plan Update. On behalf of Sierra Club. February 15, 2024.

## **PUBLICATIONS**

Glick, D., T. Gyalmo, D. Karabakal, **L. Metz**, C. Resor. 2024. *Review of Tennessee Valley Authority's Draft 2025 Integrated Resource Plan.* Synapse Energy Economics for Sierra Club.

DeLeon, S., K. Takahashi, E. Carlson, A. S. Hopkins, S. Kwok, J. Litynski, C. Mattioda, **L. Metz**. 2024. *Minnesota Building Decarbonization Analysis: Equitable and cost-effective pathways toward net-zero emissions for homes and businesses*. Synapse Energy Economics for Clean Heat Minnesota.

Shenstone-Harris, S., A. Zeng, **L. Metz**, M. Whited. 2024. *On the Road to Fleet Electrification: A Framework for Estimating Distribution System Impacts of Medium- and Heavy-Duty Vehicle Electrification*. Synapse Energy Economics for Advanced Energy United.

Eash-Gates, P., **L. Metz**, K. Schultz, S. Kwok, A. Hopkins. *Connecticut Comprehensive Energy Strategy: Buildings White Paper*. Prepared by Synapse Energy Economics for Connecticut Department of Energy and Environmental Protection. Forthcoming.

Eash-Gates, P., **L. Metz**, S. Kwok, K. Schultz, K. Takahashi. *Pathways for Connecticut Building Decarbonization: Analysis of Thermal Decarbonization Scenarios Aligned to the Global Warming Solutions Act.* Prepared by Synapse Energy Economics for Connecticut Department of Energy and Environmental Protection. Forthcoming.

**Metz, L.**, A. Napoleon, P. Eash-Gates. *Memo: Equity Metrics for Building Thermal Decarbonization in Connecticut.* Prepared by Synapse Energy Economics for Connecticut Department of Energy and Environmental Protection. Forthcoming.

**Metz, L.**, E. Carlson, O. Griot. 2023. *Methane Waste and Pollution State Factsheets*. Synapse Energy Economics for the Environmental Defense Fund.

Eash-Gates, P., O. Griot, A. Hopkins, **L. Metz**, E. Sinclair, J. Smith. 2023. *Coming Clean on Industrial Emissions: Challenges, Inequities, and Opportunities in U.S. Steel, Aluminum, Cement, and Coke.* Prepared by Synapse Energy Economics for Sierra Club.

Frost, J., P. Knight, S. Sharaf, **L. Metz**, and S. Kwok. 2023. *RGGI's Economic Benefits for Pennsylvania: Exploring the benefits of the Regional Greenhouse Gas Initiative*. Prepared by Synapse Energy Economics for Evergreen Collaborative.

**Metz, L.**, M. Whited, P. Rhodes, E. Carlson. 2023. *Distribution System Investments to Enable Medium-and Heavy-Duty Vehicle Electrification*. Synapse Energy Economics for the Environmental Defense Fund.

Knight, P., J. Frost, T. Fitch, E. Sinclair, J. Tabernero, 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.

Figueroa, 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.

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