



Elise Ashley, Senior Associate

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PROFESSIONAL EXPERIENCE

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

- Skilled modeler, leading the development of Excel-based modeling tools and analyzing the energy and emissions impacts associated with adoption of electrification measures and distributed energy resources.
- Provides research, analysis, and reports on issues including: program design and performance of technologies and policies surrounding energy efficiency, electrification, energy storage, and electric vehicles; modeling air emissions of electricity generation
- Co-leads the annual development of the AVoided Emissions and geneRation Tool (AVERT), an open-access tool for U.S. EPA by Synapse to estimate the hourly emissions and generation benefits of energy efficiency and renewable energy policies and programs
- Supports the annual development of the Electric Vehicle Regional Emissions and Demand Impacts (EV-REDI) tool, an Excel-based tool that models multiple impacts of transportation electrification for individual states

The Possible Zone, Boston, MA. *Manager of Development Operations*, January – July 2023; *Development Coordinator*, March – December 2022.

- Provided thought partnership and quality assurance on organization-wide structural and strategic planning, and supported the finalization of the organization's 4-Year Strategic Plan
- Developed a first-ever database structure for managing community partnerships data across departments
- Managed all Salesforce Administration activities, optimizing the use of Salesforce to ensure it best supported fundraising activities, and designing and documenting procedures for ensuring consistent, high-quality data management practices
- Led the improvement of cross-departmental data health and gift management processes, to increase departmental efficiency and staff capacity to achieve 2023 fundraising goals

Opinion Dynamics, Waltham, MA. *Senior Consultant, Engineering*, January – October 2022; *Consultant, Engineering*, July 2019 – December 2021.

- Completed program evaluation, measurement, and verification (EM&V) of residential and commercial utility energy efficiency programs (HVAC, lighting, DHW, weatherization, appliances, efficient products income-qualifying, SBDI) across the United States
- Consulted on energy efficiency program participant survey questions and conducted follow-up survey phone calls

- Developed a lifecycle cost analysis tool to estimate non-energy benefits of standard versus energy efficient equipment.
- Co-developer of a data collection instrument and research methods to support the evaluation of a virtual inspection process instituted in response to Covid-19
- Led the development of a data collection instrument to assess California statewide building compliance to the California Title 24 Part 6 Building Energy Efficiency Codes
- Recommended, reviewed, and drafted Technical Reference Manual (TRM) updates

Sustainability Exchange, Washington University in St. Louis, St. Louis, MO. *Intern, January – May 2019.*

- Worked in a student team to conduct an energy potential study of all municipal buildings for the City of St. Louis, MO, and proposed an action plan to reduce energy consumption
- Study tasks included desk reviews, developing a building survey instrument, and leading site visits

Renewable Energy Student Engagement Team (RESET), Washington University in St. Louis, St. Louis, MO. *Intern, November 2018 – May 2019.*

- Researched solar energy policy and incentives for a student-led solar panel installation project proposal at Washington University in St. Louis.

EDUCATION

Washington University in St. Louis, St. Louis, MO

Bachelor of Science in Mechanical Engineering, with a minor in Psychology, 2019.

First Place Mechanical Engineering Senior Design Project

Graduated Cum Laude and with Dean's List Honors

University of Auckland, Auckland, New Zealand

Completed coursework in Thermodynamics, Thermofluids & Fluid Mechanics, and Environment & Society, 2017.

PUBLICATIONS

Knight, P., C. Resor, E. Ashley, S. Shenstone-Harris. 2026. *Overcharged: Suppliers' Retail Premiums are Inflating Massachusetts Electric Bills.* Prepared by Synapse Energy Economics for Barr Foundation.

Takahashi, K., A. Hopkins, P. Eash-Gates, E. Carlson, K. Schultz, E. Ashley. 2025. *Strategic Roadmap for Building Decarbonization - Policy, Regulatory, Workforce, and Equity Strategies for a Cleaner, Greener New Jersey.* Synapse Energy Economics and New Jersey agencies for the Governor's Office of Climate Action and the Green Economy.

Mattioda, C., S. Schadler, T. Gyalmo, P. Knight, E. Ashley. 2025. *A Snapshot of the Energy Landscape in Illinois: Considerations for the State's Energy Transition*. Prepared by Synapse Energy Economics for Illinois Manufacturer's Association.

Tucker, C., P. Knight, E. Ashley, I. Weiss. 2024. *Public Health Benefits per Kilowatt-Hour of Energy Efficiency and Renewable Energy in the United States: A Technical Report*. Prepared by Synapse Energy Economics for U.S. Environmental Protection Agency.

Kallay, J., A. Napoleon, E. Ashley, K. Takahashi, T. Woolf. 2024. *Review of New Brunswick Power's 2024/25 to 2026/27 DSM Program Initiatives Update*. Synapse Energy Economics for the New Brunswick Energy and Utilities Board Staff.

Synapse Energy Economics, Resource Insight, Les Deman Consulting, North Side Energy, and Sustainable Energy Advantage. 2024. *Avoided Energy Supply Components in New England: 2024 Report*.

Synapse Energy Economics for AESC 2024 Study Group

SKILLS

- **Modeling tools and software:** Microsoft Office Suite, Excel, Visual Basic for Applications (VBA) Avoided Emissions and generation Tool (AVERT), Electric Vehicles Regional Emissions and Demand Impacts (EV-REDI), ComStock, ResStock, Salesforce Administration, MATLAB, Java

Resume updated January 2026