Elise Ashley, Senior Associate I

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PROFESSIONAL EXPERIENCE

Synapse Energy Economics Inc., Cambridge, MA. *Senior Associate I*, Apr 2025–Present; *Associate*, Jul 2023 – Apr 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-led 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,* Jan–Jul 2023; *Development Coordinator,* Mar–Dec 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*, Jan–Oct 2022; *Consultant, Engineering*, Jul 2019–Dec 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*, Jan–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*, Nov 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., S. Sharaf, S. Chavin, E. Ashley, A. Zeng, E. McGarvey, S. Shenstone-Harris, R. Aidun. 2026. *Assessing Electricity Resource Adequacy in Pennsylvania and PJM*. Synapse Energy Economics, Mondre Energy, and Aspen Technologies for the Pennsylvania Public Utility Commission.

Sharaf, S., S. Chavin, E. Ashley, A. Star, P. Knight, C. Springer. 2026. "Planning Ahead: How Integrated Resource Planning in Wisconsin Can Lower Energy Bills." Prepared by Synapse Energy Economics for Advanced Energy United.

Knight, P., S. Kwok, E. Ashley, A. Glaser Schoff, S. Schadler, S. Sharaf, A. Zeng, A. Napoleon. 2026. "Making Energy More Affordable in New York." Presentation prepared for the Natural Resources Defense Council and the Evergreen Collaborative.

Shenstone-Harris, S., I. Weiss, E. Ashley, D. Karabakal, W. Dejeanlouis. 2026. *Driving Affordable Rates with EVs.* Synapse Energy Economics for the Natural Resources Defense Council.

Knight, P., C. Resor, E. Ashley, S. Shenstone-Harris, A. Star. 2026*. Overcharged in New England: Suppliers' Retail Premiums Are Inflating New England Electric Bills*. Prepared by Synapse Energy Economics for The Energy Foundation.

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 October 2026