

Caroline Resor, Senior Associate

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

PROFESSIONAL EXPERIENCE

Synapse Energy Economics Inc., Cambridge, MA. *Senior Associate*, October 2024 – Present.

- Provides research, analysis, and consulting services on behalf of public interest clients on topics including resource planning, energy and climate policy, and electric utility customer programs (low-income discount rates, arrearage management programs, income-qualified weatherization programs, and disconnection protections)

Graham Sustainability Institute, Ann Arbor, MI. *Graduate Researcher*, January-July 2024.

- Wrote report explaining the complex tax policy treatment of utility-scale renewable energy projects in Wisconsin and a guide for how to estimate incremental local property tax revenue and other benefits associated with developing a project
- Analyzed renewable energy local tax benefits across four Midwestern states and presented findings to rural economic development client to inform advocates

RMI, Cambridge, MA. *Summer Associate, Utility Business Models & Regulation*, June-August 2023.

- Consulted for the Hawaii Public Utility Commission's (PUC) Equity Docket team on creating new and improving existing electric affordability programs for low-income customers
- Evaluated programs, including low-income discount rates, arrearage management programs, income-qualified weatherization programs, and disconnection protections across states, and compared programs' accessibility and ease of enrollment, costs, bill impacts, customer utilization rates, and impacts on energy burden, among other metrics
- Based on interviews with consumer advocates, utility employees, and regulatory staff, wrote case studies for regulators recommending specific actions to reduce electric shutoffs

Cypress Creek Renewables, Santa Monica, CA. *Summer Associate, Solar Development Policy & Strategy*, June-August 2022.

- Defined and presented to company executives an original solar development host community engagement strategy, informed by expert interviews, that solar developers used to de-risk a \$160M pipeline of solar projects
- Identified and filled key gap in company's development playbook by operationalizing local political analysis, stakeholder mapping, and vote counting in their approach to local zoning across 20+ states

American Flood Coalition, Washington, D.C. *Strategy Associate*, August 2019 – May 2021.

-
- Managed project of 15 people across a partner and two local governments to calculate costs/benefits of flood mitigation tactics; managed detailed project timetable, conducted coordination calls; presented in a public meeting; shaped local policy
 - Built and managed AFC's first grant program: Designed evaluation criteria, sourced and vetted community-based organization grantees, and managed and mentored three grantee organizations over the course of a year
 - Supported development of a successful grant proposal to create a municipal grant program focused on environmental justice communities: managed origination team, created weekly progress reports, and led transaction negotiations with consultant partner
 - Authored report recommending ways for federal disaster policy to better serve environmental justice communities, adapted by Rep. Joe Morelle (D-NY) as an amendment to the Moving Forward Act, which was passed by the U.S. House

NASA DEVELOP, Goddard Space Flight Center, Greenbelt, MD. Summer *Local Government Consultant*, January 2014 – May 2017. *NASA DEVELOP is a selective 10-week program in which emerging leaders harness NASA data to answer local government clients' questions.*

- Built machine learning model to quantify the feasibility of using satellite data to predict floods in Ellicott City, Maryland
- Secured continuation of project by making extensive efforts to repair rocky client relationship

HASI (f.k.a. Hannon Armstrong), Annapolis, MD. *First U.S. public company dedicated solely to decarbonization; >\$12B assets under management in efficiency and renewable energy.*

Wind and Solar Portfolio Senior Analyst, February-May 2019

- Managed an \$800M portfolio of solar and wind investments, constantly tracked investment performance vs. contract terms
- Built strong, positive relationships with existing and potential clients through doing site visits and attending conferences
- Increased solar project revenues by 8% by implementing bird abatement retrofit for Massachusetts C&I projects
- Assisted business development team during transactions on various decarbonization-focused investments, deftly managing typical workload with investment screening tasks
- Created model to quantify estimated future climate change impacts to entire solar portfolio for Task Force on Climate-Related Financial Disclosures (TCFD) reporting

Portfolio Management Analyst, July 2017–January 2019

-
- Enabled more active portfolio operations management by independently building an ArcGIS dashboard to monitor in real time the geographic exposure of all 88,000 solar and wind projects to hurricanes, flash floods, wildfires, and other disasters
 - Implemented a portfolio data analytics software platform, improving portfolio management team efficiency by 30%

EDUCATION

University of Michigan, Ann Arbor, MI

Master of Business Administration and Master of Science in Environmental Policy & Planning, 2024
Top 5% of MBA Class, Erb Institute Scholarship, Forte Foundation Scholarship

Dartmouth College, Hanover, NH

Bachelor of Arts with honors in Environmental Studies, 2017

PUBLICATIONS AND PRESENTATIONS

Borden, E., C. Resor, M. Bandyk, A. Zeng, A. Glaser Schoff, T. Gyalmo, P. Knight, S. Shenstone-Harris. 2025. *Policy Interventions to Address Rising Electricity Costs in New Jersey*. Synapse Energy Economics for the Natural Resources Defense Council and Evergreen Collaborative.

Knight, P., S. Chavin, J. Hittinger, A. Zeng, C. Resor. 2025. *Modernizing Pennsylvania's Clean Energy Policies: An analysis of the proposed PRESS and PACER policies*. Synapse Energy Economics for Pennsylvania Department of Environmental Protection.

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.

Resor, Caroline, et al. "State of Washington Renewable Energy Policy Analysis Report." Center for Local, State, and Urban Policy, 2023.

Hughes, Sara, Caroline Resor & Heather Newberry. "State policy and local resilience: evaluating state policies for flood resilience in the Great Lakes region of the United States." *Climate Policy*, 2023.

Resor, Caroline and Kate Stein. "Charting a Course: How the Town of Surfside, FL Is Using Science to Craft Adaptation Policy," National Coastal & Estuarine Summit, 2020, Providence, RI.

Bourne, Stephen, and Caroline Resor. "Using Simulation to Forecast Resilience in Surfside, Florida." *American Water Resources Association IMPACT*, vol. 22, no. 2, 2020, pp. 9-10.

Mediate, Emily, et al. "Scaling Up Local Experience to Achieve National Resilience," ResCon, 2020, New Orleans.

Resor, Caroline, et al. "Turning the Tide: Opportunities to Build Social Equity Through Federal Flood Disaster Policy." American Flood Coalition, 2020.

Resor, Caroline, et al. "Dual Disaster Handbook." American Flood Coalition, 2020.

Cox, Michael, et al. "The Dominican Fishery of Manzanillo: A Coastal System in Transition." *Ocean & Coastal Management*, 2018.

Resume updated January 2025