

Ida Weiss, Associate

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PROFESSIONAL EXPERIENCE

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

- Performs quantitative and qualitative research and analysis on energy-sector issues including, energy justice, building and transportation electrification, distributed energy resources, and integrated resource planning.

Epsilon Associates, Maynard, MA. *Staff & Project Engineer*, November 2021 – January 2024

- Modeled stationary and mobile air pollution sources using air dispersion software (AERMOD) and summarized results in technical reports for regulators, private developers, and the public.
- Analyzed potential project impacts on EJ populations using socioeconomic, pollution burdens, public health, and demographic data.
- Developed project-level vehicle emissions inventories with EPA's Motor Vehicle Emissions Simulator.
- Oversaw environmental/air permit compliance for a new natural gas liquefaction plant in MA
- Used ArcGIS, Python, and MS Excel for EJ data visualization and meteorological data analysis.

Medford Engineering Division, Medford, MA. *Engineering Intern*, February – August 2020

- Developed an MS Excel resource guide on successful green infrastructure projects.
- Incorporated climate resiliency planning to the Wrights Pond Dam Emergency Action Plan.

Tufts Civil & Environmental Engineering Department, Somerville, MA. *Research Assistant*, June 2020 – May 2021

- Completed a year-long Honors Thesis: *Impact of Aviation Emissions on Black Carbon Concentrations in Communities Near Boston Logan Airport*.
- Drove an outfitted EV on mobile monitoring routes to sample Greater Boston air pollution.
- Cleaned, processed, and analyzed pollutant concentration data in Python and Excel; mapped black carbon and particulate matter in ArcGIS.
- Presented weekly findings to Tufts and BU's School of Public Health research team.

Tufts Biology Department, Santa María de Dota, Costa Rica. *Global Research Assistant*, Summer 2019

- Collected field data on >600 individual coffee plants on 30 coffee farms in rural Costa Rica.
- Interviewed 30 coffee farmers in Spanish on agricultural practices & climate perspectives.
- Translated and organized interview responses in MS Excel and analyzed in NVivo and R.
- Investigated trends between cropping intensity and coffee output and presented at Tufts Research Experience for Undergrads - Summer Research Symposium.

EDUCATION

Tufts University, Medford, MA

Bachelor of Science in Environmental Engineering, minor in Environmental Science and Policy,
magna cum laude, 2021

Universidad de Carlos III, Madrid, Spain

Completed coursework in Fluid Mechanics, Python, Markets and the Environment (*Mercados y Ambiente*), and Engineering Business. Fall 2019

SKILLS

- **Air dispersion models:** AERMOD, AERSCREEN, CAL3QHC(R), CALINE
- **Vehicle emissions models:** MOVES
- **Programming/Computer:** Python, Matlab, R, NVivo, MS Office Suite
- **Spatial:** ArcGIS, ArcMap
- **Language:** Spanish

PUBLICATIONS

Napoleon, A., I. Weiss, E. Carlson, T. Woolf, G. Ehrendreich, N. Newman, J. Michals. 2025. *Assessing the Distribution of Costs and Benefits of Energy Efficiency and Electric Vehicle Programs to Different Customers in Illinois*. Synapse Energy Economics and Midwest Energy Efficiency Alliance for E4theFuture.

Mueller, S. N. Hudda, J. Levy, J. Durant, P. Patil, N. Franzen Lee, I. Weiss, T. Tatro, T. Duhl, K. Lane. 2022. Changes in Ultrafine Particle Concentrations near a Major Airport Following Reduced Transportation Activity during the COVID-19 Pandemic. *Environmental Science & Technology Letters* 9 (9). 706-711
DOI: 10.1021/acs.estlett.2c00322

Shenstone-Harris, S., M. Whited, K. Takahashi, S. Schadler, A. Fuzaylov, I. Weiss. 2025. *How Will Future Electric Vehicle Adoption and Building Electrification Affect Electric Rates?* New Jersey Factsheet. Synapse Energy Economics for Natural Resources Defense Council.

Shenstone-Harris, S., M. Whited, K. Takahashi, S. Schadler, A. Fuzaylov, I. Weiss. 2025. *How Will Future Electric Vehicle Adoption and Building Electrification Affect Electric Rates?* New Mexico Factsheet. Synapse Energy Economics for Natural Resources Defense Council.

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