Sabine Chavin, Associate

Synapse Energy Economics I 485 Massachusetts Avenue, Suite 3 I Cambridge, MA 02139 I 617-456-8295
schavin@synapse-energy.com

PROFESSIONAL EXPERIENCE

Synapse Energy Economics Inc., Cambridge, MA. *Associate*, July 2022 – Present

- Consults on energy-sector issues, including integrated resource planning, power system modeling, federal energy legislation, tracking utility performance, electrification policies, and energy storage.
- Skilled power system modeler, with experience using capacity expansion and production cost modeling to assess the impacts of federal and state energy policies, forecast avoided energy costs and evaluate energy equity considerations.
- Co-developer of interactive website dashboards, including one to assess energy and emissions in the Northeast and one to track the performance of electric utilities in Puerto Rico.
- Assists in testimony development focused on power plant economics.

Kleinman Center for Energy Policy, University of Pennsylvania. *Student Fellow,* January – May 2022

- Attended energy and climate policy seminars on a range of topics including the geopolitics of rare earth materials, adaptive architectural design and geoengineering.
- Researched and authored a blog post on microgrid tariff regulations

Neuroscience Lab, University of Pennsylvania. *MindCORE Fellow in Balasubramanian Lab*, Summer 2021

- Designed and coded in Python a model of spatial navigation to better understand biological neural navigation processes
- Studied analytical techniques for interpreting our computational results

Cryo-electron Tomography Lab, University of Pennsylvania. *Research Assistant in Chang Lab*, Summer 2020

- Generated and analyzed tomograms (3D representations) of parasites from 2D electron microscope data
- Authored literature review on the lifecycle of *Plasmodium falciparum* (malaria parasite)
- Explored useful machine-learning approaches to classifying proteins for the group to use going forwards

EDUCATION

University of Pennsylvania, Philadelphia, PA
Bachelor of Arts in Physics: Concentration in Computer Techniques, 2022
Master of Science in Physics, 2022

PUBLICATIONS

Takahashi, K., A. S. Hopkins, E. Carlson, S. Schadler, S. Chavin. 2024. *Memo: Assessment of Electric Grid Headroom for Accommodating Building Electrification (Revised July 2024)*. Synapse Energy Economics to New Yorkers for Clean Power.

Frost, J., S. Chavin, P. Silva. 2023. *Impacts of Electricity Generation Regulatory Structures on Connecticut Ratepayers.* Synapse Energy Economics for Connecticut Office of Consumer Counsel.

Kwok, S., P. Knight, J. Frost, S. Chavin, P. Rhodes. 2023. *Modeling the Benefits of Energy Storage in Maryland*. Synapse Energy Economics for American Clean Power Association.

Frost, J., J. Litynski, S. Chavin, P. Silva. 2023. *The Impact of Resource Inflexibility on Capacity Accreditation in New England*. Synapse Energy Economics for Sierra Club.

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.

Goldberg, D., S. Chavin, J. Tabernero, P.Knight. 2023. *Green Dash Northeast: state-level data on emissions and energy in the Northeast.* Synapse Energy Economics for Barr Foundation.

SKILLS

Python, OCaml, MATLAB, Java, Microsoft Office Suite

Resume updated July 2023