

ENERGY AND ENVIRONMENTAL ECONOMICS, INC.
Managing Consultant

San Francisco, CA

Ms. Rogers is a member of E3's Asset Valuation team where she focuses on transportation electrification and the integration and valuation of renewables, storage, and distributed energy resources. Since joining E3 in January 2021, Emily has gained extensive experience supporting revenue forecasting and financial transactions of storage and renewables portfolios. Emily leads the use of RESTORE, E3's inhouse optimization model for storage and DER dispatch, for Asset Valuation projects. She has managed many projects for developers and investors, especially those interested in utility-scale storage economics in the CAISO and ERCOT wholesale markets. Emily has demonstrated expertise in transportation electrification through working with utilities and automakers to evaluate the grid impacts of electric vehicles and analyze the value of vehicle to grid integration.

Prior to joining E3, Ms. Rogers held research positions at the UC Berkeley Transportation Sustainability Research Center (TSRC) and Energy, Controls, and Applications Laboratory (eCAL). Ms. Rogers holds an M.S. in Civil and Environmental Engineering from UC Berkeley and B.S. in Mechanical Engineering from University of Southern California.

Select E3 projects include:

- **Confidential Automaker, Multiple VGI Projects (2022 – 2024).** Supported confidential automotive OEM on both Vehicle-Grid-Integration (VGI) Market Assessment and an evaluation of the value of electric vehicles to microgrids. For the first project, she presented potential value streams for EV batteries enabled with V2G. In the second engagement, E3 offered more technical analysis to evaluate the value of EVs to microgrids using RESTORE. Emily was technical lead for RESTORE for the work in which E3 synthesized its highly technical inhouse optimization model results to wider audience. Emily was the project manager for subsequent engagements focused on comparing storage vs. VGI and the value of V2H when paired with solar or storage.
- **Multiple Confidential Developers and Investors, Storage Revenue Forecasting (2021 – 2024).** Project Manager for multiple E3 projects focused on storage revenue forecasting in wholesale markets using RESTORE optimization model.
- **Confidential Developer, Valuation of Offshore Wind in Hawaii (2023).** Project Manager for engagement focused on the potential capacity need for renewables in Hawaii and cost competitiveness of offshore wind.
- **Confidential Renewable Investor/Developer, Long Duration Energy Storage (LDES) Valuation (2022 – 2023).** Project Manager for an E3 project forecasting revenues for a client considering investing in specific LDES company. Led a competitive assessment against other LDES technologies, presented to client, and handled day-to-day client communication.
- **New York Power Authority, Small Clean Power Plant Adaptation Study (2021 – 2022).** Conducted technical modeling to evaluate the ability of battery storage to replace fossil fuel peaker plants

located in environmental justice communities across New York City. Contributed to report published publicly in April 2022.

- **New York Power Authority Transit Bus Electrification Master Plan (2021).** Evaluated the cost implications of electrifying New York state's five largest transit agencies outside of New York City by 2035. Findings were used to inform electrification roadmaps for each transit agency.
- **Sacramento Municipal Utility District, Net Energy Metering Successor Rate Modeling (2021).** Performed detailed economic analysis assessing the cost shifts under each successor rate compared to NEM 1.0 compensation. Used E3's RESTORE model to estimate investment payback and value of solar and solar plus storage for SMUD customers.
- **GridLab, Distribution Cost Impacts of High Electrification Analysis (2021).** Developed model to estimate the distribution connected and coincident peak load, investment, and rate impacts of a high transportation electrification adoption scenario. Contributed to a report published publicly as an appendix to GridLab and UC Berkeley's 2035 Report.

TRANSPORTATION SUSTAINABILITY RESEARCH CENTER, UC BERKELEY

Berkeley, CA

Research Associate

September 2020 – December 2020

- Developed a zero-emission bus (ZEB) implementation guidebook to assist California transit fleets in their transition to 100% ZEB fleets by 2040
- Compiled data on available bus, infrastructure, and fleet management technologies

PRE-ENGINEERING PROGRAM, UC BERKELEY

Berkeley, CA

Design Assistant

July 2020 – August 2020

- Provided project guidance for teams of underrepresented and first-generation incoming UC Berkeley College of Engineering students
- Taught electronics and CAD basics

ENERGY, CONTROLS, & APPLICATIONS LAB, UC BERKELEY

Berkeley, CA

Graduate Researcher

May 2020 – August 2020

- Developed and deployed a department-wide survey to Civil and Environmental Engineering undergraduate students to quantify the value of in-person courses during the COVID-19 pandemic
- Presented COVID-19 survey results to department chair for decision making and CITRIS
- Designed stated preference survey to determine price elasticity of electric vehicle charging options to make workplace charging economically sustainable

SUSTAINABILITY SYSTEMS GROUP, UNIVERSITY OF SOUTHERN CALIFORNIA

Los Angeles, CA

Undergraduate Researcher

May 2018 – May 2019

- Analyzed data integrity within the energy-water nexus body of literature, presented results in a peer-reviewed publication
- Identified water infrastructure locations and aggregated data to quantify the electricity required for water services in LADWP territory with high spatio-temporal resolution
- Actively participated and presented findings in weekly group meetings

CLARK PACIFIC CONSTRUCTION, IT DEPARTMENT

Independent Contractor

Los Angeles, CA
May 2016 – December 2016

- Rewrote VBA programs in VB.NET to update and build custom AutoCAD Macros
- Hired as an independent contractor after completing summer internship

Education

University of California, Berkeley Berkeley, CA
M.S., Civil and Environmental Engineering - Energy, Civil Infrastructure, and Climate Program 2020

University of Southern California Los Angeles, CA
B.S., Mechanical Engineering 2019

Publications

Grubert, E., **Rogers, E.**, & Sanders, K. T. (2020). Consistent Terminology and Reporting Are Needed to Describe Water Quantity Use. *Journal of Water Resources Planning and Management*, 146(8).
doi:10.1061/(asce)wr.1943-5452.0001241