



Christa Heavey

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ENERGY AND ENVIRONMENTAL ECONOMICS, INC.
Associate Director

San Francisco, CA

Ms. Heavey's work focuses on the integration of distributed energy resources into the grid to support a clean energy future. Since joining E3 in 2019, Ms. Heavey has led work on transportation electrification for utilities, state agencies, and automakers to develop new programs, evaluate the impacts of electric vehicles on the grid, and determine the potential value of vehicle-grid integration. Ms. Heavey has also worked on utility rate design, regulatory filings, distributed solar, building electrification, and grid modernization.

Ms. Heavey joined E3 from Pacific Gas & Electric Company, where she led regulatory and strategy work related to California's Low Carbon Fuel Standard, as well as data analytics on customer EV charging behaviors. She also completed clean energy fellowships at Natural Resources Defense Council and Union of Concerned Scientists. Ms. Heavey holds an M.S. in Civil and Environmental Engineering (Atmosphere/Energy) from Stanford University and a B.A. in Mathematics-Physics from Whitman College.

Select E3 projects include:

- **New York State Energy Research and Development Authority, Distributed Solar Roadmap, 2021.** Led E3 modeling and analysis on community solar deployment and incentive levels for extension of the NY-Sun program to support the state's goal for 10 GW for distributed solar by 2030.
- **Hawaiian Electric Company, Electric Vehicle Rate Design and Regulatory Filings, 2020-2021.** Managed E3 team to support Hawaiian Electric Company with four electric vehicle filings. Developed EV rate design for commercial EV charging sites. Led development of three electric vehicle infrastructure filings for the company to build DC fast charging stations, and make-ready EV charging infrastructure for electric buses and at public light-duty EV charging locations.
- **Confidential Client, DC Fast Charging (DCFC) Market Assessment, 2020.** Performed market assessment on DC fast charging stations for electric vehicles in California, and led analyses on potential station costs, utilization, and revenues.
- **California Public Utilities Commission, Integrated Resource Planning Proceeding, 2019-Present.** Leading electric vehicle studies, including distribution grid impacts analysis, to support IRP modeling and broader CPUC efforts.
- **SLAC National Laboratory, Smart Charging Infrastructure Planning Tool, 2019-2020.** Led E3 team to perform cost-benefit analysis on electric vehicle smart charging scenarios in California and integrated functionality into SLAC's online tool.
- **California Public Utilities Commission, Avoided Cost Calculator, 2019-2020.** Supported annual updates of the Avoided Cost Calculator, including a major overhaul in 2020 to align with the state's Integrated Resource Plan, to produce hourly avoided costs and emissions for valuation of distributed energy resources.
- **National Grid, Grid Modernization Filing, 2019.** Performed benefit-cost analysis for National Grid's grid modernization strategy in Rhode Island.

PACIFIC GAS & ELECTRIC COMPANY

San Francisco, CA

Expert Analyst, Clean Transportation Strategy

2018 – 2019

- Developed transportation electrification program proposals for PG&E addressing long-term goals, including a pilot to provide electric vehicle (EV) chargers to low-income residences
- Represented PG&E in Low Carbon Fuel Standard (LCFS) activity at the California Air Resources Board and developed new electric vehicle programs using PG&E's LCFS credit revenue

Senior Analyst, Electric Vehicles

2017 – 2018

- Initiated implementation of PG&E's EV Charge Network program to install 7,500 electric vehicle charging stations and led supporting regulatory work at the California Public Utilities Commission
- Created goals and requirements for a program at PG&E's EV Charge Network stations to manage EV charging load and provide grid services
- Managed development of IT systems to collect EV charging data from PG&E's EV Charge Network program; created program data requirements, tested vendor capabilities, and developed reporting dashboards
- Led cross-functional coordination between three PG&E lines of business to produce a strategy presentation on electric vehicles and clean transportation for senior company officers

Analyst, Electric Vehicles

2015 – 2017

- Led development and implementation of PG&E's Clean Fuel Rebate program, including development of IT systems, marketing materials and strategy, and rebate processing operations
- Managed PG&E's Low Carbon Fuel Standard (LCFS) program, including quarterly and annual reporting, monitoring LCFS compliance requirements, and representing PG&E in LCFS policy discussions with the California Air Resources Board
- Produced PG&E's forecast for EV adoption and corresponding electric load and worked with internal stakeholders to incorporate EV load in PG&E's total system energy forecast

NATURAL RESOURCES DEFENSE COUNCIL

San Francisco, CA

Sustainable Energy Fellow

2014 – 2015

- Co-authored and performed analytics for NRDC's *California's Golden Energy Efficiency Opportunity* report
- Represented NRDC in various regulatory proceedings at the California Energy Commission and the California Public Utilities Commission, including Title 20, EPIC, AB 1257, IEPR, and the California Energy Demand Forecast
- Led analytics on utility energy efficiency programs and statewide greenhouse gas emission reduction scenarios

STANFORD UNIVERSITY

Stanford, CA

Researcher, The Solutions Project

2014

- Led intern research on the potential to transition to 100 percent renewable energy
- Created a 113-country database to support new work developing country-specific renewable resource plans

UNION OF CONCERNED SCIENTISTS

Cambridge, MA

Energy Fellow

2013

- Supported clean energy advocacy by providing research and data analytics

- Researched the energy sector’s vulnerabilities to climate change and extreme weather events; presented findings to UCS staff to initiate long-term project on energy sector resilience
- Developed educational materials on clean energy for the UCS website, including an interactive map of renewable energy projects in California

WHITMAN COLLEGE BIOPHYSICS RESEARCH LABORATORY

Walla Walla, WA

Research Assistant

2011 – 2012

- Measured the rate of diffusion through nanoscale pores of protein crystals using confocal microscopy
- Performed X-ray diffraction experiments to study the structures of protein crystals

UNITED STATES SENATE

Seattle, WA and Washington, DC

Intern, Senator Maria Cantwell

2008

- Worked with constituent services staff to advocate for constituent needs
- Communicated with constituents and drafted letters explaining current legislation

Education

Stanford University

Stanford, CA

M.S., Civil and Environmental Engineering (Atmosphere/Energy)

2012 – 2014

Whitman College

Walla Walla, WA

B.A., Mathematics-Physics (Summa Cum Laude)

2008 – 2012

Minor: German Studies

Citizenship

United States