44 Montgomery Street, Suite 1500, San Francisco, CA 94104 xantha.bruso@ethree.com

ENERGY AND ENVIRONMENTAL ECONOMICS, INC.

San Francisco, CA

Senior Director

Ms. Bruso joined E3 in 2023 to lead the firm's transportation electrification practice as a member of its Climate Pathways and Electrification group. She advises on projects to analyze the impact of transportation electrification on the electric grid, assess the costs and benefits of transportation electrification programs, and characterize the value of vehicle-grid integration. Prior to joining E3, Ms. Bruso was a principal at Cadmus, where she managed teams to conduct technical and policy analyses on transportation electrification planning projects, and to design, implement, and evaluate utility EV charging infrastructure programs. Prior to Cadmus, she led automated vehicle policy and partnerships at AAA Northern California, Nevada and Utah, and held multiple positions over twelve years at Pacific Gas & Electric Company covering clean transportation strategy, climate policy, energy procurement, corporate sustainability, and renewable energy programs. Ms. Bruso received her Master of City Planning from Massachusetts Institute of Technology, Master of Business Administration from Presidio Graduate School, and Bachelor of Arts from Dartmouth College.

Selected E3 projects include:

New York Power Authority, Electric Vehicle Filing Review and Benefit-Cost Analysis (2023). Led an E3 project that assisted the New York Power Authority (NYPA) in a filing review and benefit-cost analysis (BCA) in response to the New York Public Service Commission's direction for NY utilities to implement programs and incentives around EV adoption and an EV Phase-In Rate (EV-PIR). The filing review involved research and summary of near- and long-term incentive programs created by six NY utilities, as well as each utility's unique EV-PIR structure. For the BCA, E3 used charging data from NYPA chargers to create a comparison between the cost of electricity paid by NYPA for EV charging under each utility's current rate structure and the newly proposed EV-PIRs. The model that E3 developed enabled NYPA to quickly and easily compare revenues and costs associated with EV charging within each utility's service area under current and proposed rates, both currently and with certain assumed levels of EV charging growth in the future.

Palo Alto Electrification Study (2023 – ongoing). E3 is conducting an electrification study to assess the cost of meeting Palo Alto's building and transportation electrification goals. Ms. Bruso is the project lead for the EV Charger Strategic Plan scope of the study, which will provide a blueprint for City actions to build EV charging infrastructure, and project the cost and funding needs related to these actions. This study will inform the electrification programs needed to meet the City's Sustainability/Climate Action Plan goals.

Nashville Electric Service EV Forecast and Distribution Grid Impacts Analysis (2023 – 2024). E3 is conducting an analysis of the distributional impacts of EV charging in NES service territory. Ms. Bruso is project lead for this analysis, which will develop outputs for NES on energy demand, GHG emissions, fuel usage, and number of EVs adopted for sector and subsectors of the economy. E3 will use this analysis to

give NES a better understanding of where infrastructure is needed in the short and the long-term to support vehicle electrification on the NES system.

Northern Indiana Public Service Company EV Program Benefit-Cost Analysis (2023 – 2024). E3 is supporting NIPSCO's transportation electrification program filing by performing a benefit-cost analysis (CBA) for five programs, including a Managed Charging & Behavior Reporting Program, Fleet Advisory Program, Make-Ready Program, and Commercial Charger Rebate Program, and by submitting testimony as an expert witness. Ms. Bruso serves as project lead and expert witness.

CADMUS *Principal, Strategic Electrification*

Oakland, CA 2021 – 2023

- Led the multi-year evaluation of a \$735M portfolio of California investor-owned utility programs to install EV charging infrastructure for fleets
- Designed and implemented a charging-as-a-service program to install EV chargers for multifamily, workplace, and fleet customers for the Sacramento Municipal Utility District
- Analyzed climate change mitigation scenarios to develop the New York State Clean Transportation Roadmap for NYSERDA
- Developed the Operational Performance Assessment of the J.D. Power Certified Sustainability Leader program, which assesses utilities' operational performance against sustainability best practices across four categories: management and leadership, resilience and adaptability, climate change mitigation, and customer engagement and advocacy

AAA NORTHERN CALIFORNIA, NEVADA & UTAH

Manager, Automated Vehicle (AV) Strategy

Berkeley, CA 2018 – 2021

- Created and implemented AAA's AV policy strategy for safe AV deployment across seven western states
- o Advised AAA's federal affairs team on state AV activities that could impact federal AV policy
- Tracked related policy issues for AAA including electric vehicles, car-sharing, ride-hailing, and micromobility
- Represented AAA on AV policy at industry forums
- Managed research collaborative with industry, academia, and non-profits on the quantification of AV safety
- Managed AAA's share of two multi-million-dollar US DOT grants to test AVs in the San Francisco Bay Area
- Advised GIG Car Share on how to monetize LCFS credits from its electric vehicle fleets in California

PACIFIC GAS & ELECTRIC COMPANY

San Francisco, CA 2006 – 2018

Manager, Climate Policy and Analysis (2013-2018) Expert Analyst, Energy Procurement (2012-2013)

Senior Program Manager, Corporate Sustainability (2008-2011)

Clean Technology Analyst, Energy Procurement (2007)

Regulatory Analyst, Regulatory Relations (2006-2007)

- Was continuously promoted to positions of increasing responsibility, including program, project, and team management
- Managed team of 3-5 staff to analyze and advocate on the design and implementation of climate, energy and transportation policies at the state and federal levels including the Cap-and-Trade program, Low Carbon Fuel Standard, and Clean Power Plan
- Oversaw research projects on the impacts of state and federal climate, energy, and transportation policies on the economy and the environment to inform PG&E's policy and commercial priorities
- Led PG&E's voluntary GHG reporting to TCR and set up PG&E's compliance GHG reporting to ARB and EPA
- Managed PG&E's first RFO for Cap-and-Trade compliance instruments and negotiated commercial contracts
- Developed new products for PG&E customers including renewable energy and carbon offset programs
- Represented PG&E at industry forums

CONCUR, INC.Environmental Consultant
2003 – 2005

- Mediated multi-party environmental disputes in California and other western states
- o Facilitated stakeholder dialogues on natural resource management and development issues
- Conducted strategic planning and environmental policy analysis for government natural resource agencies
- Designed and taught professional development courses on interest-based negotiation and mediation

Education

Presidio Graduate School, M.B.A.

San Francisco, CA

Massachusetts Institute of Technology *M.C.P.*

Boston, MA

Dartmouth College B.A., Geography, Asian Studies (double major)

Hanover, NH