

Dieter Smiley, P.E.

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ENERGY AND ENVIRONMENTAL ECONOMICS, INC.

San Francisco, CA

Senior Consultant

Dieter Smiley, P.E. supports E3's Asset Valuation group with expertise in energy market analysis, policy evaluation, and the technical and economic assessment of clean energy resources and large loads. At E3, Mr. Smiley has led greenhouse gas lifecycle emissions analysis for utility clean heat portfolios and Hydrogen market reports, Carbon allowance price research and forecasting, and the development of load forecasts for the Western, Eastern, and ERCOT interconnections, which are utilized in E3's off-the-shelf standard market price forecasts. He supports a wide range of project types, with current focus on large load growth from data centers and their implication for resource planning and system costs, emerging technologies such as offshore wind and clean hydrogen, and developing capacity expansion and production cost models in PLEXOS to inform both near- and long-term energy market dynamics, trends, and prices.

Prior to joining E3, Mr. Smiley worked as an engineer at the California Air Resources Board, where he helped fuel producers participate in the Low Carbon Fuel Standard program, and at the California Public Utilities Commission, reviewing renewable energy contracts, ensuring RPS compliance for load-serving entities, implementing California's Bioenergy Feed-In Tariff, and developing a greenhouse gas lifecycle assessment tool for distributed bioenergy projects. Mr. Smiley is a licensed Professional Mechanical Engineer (CA). He holds an M.S. in Civil and Environmental Engineering from the University of California, Berkeley, and a B.S. in Industrial Systems Engineering from The Ohio State University.

Select E3 work includes:

- Assisted utility, investment, and developer clients through written reports and presentations on topics across energy project economics, renewable energy development, transaction diligence, load forecasting, emissions analysis, regulatory policies and procurement mechanisms, and energy market research in the U.S. West, Rockies, Midwest, and Southeast regions.
- Led long-term load forecasting across CAISO, PJM, and WECC to support E3's market price forecasts, with insights applicable to MISO planning.
- Developed PLEXOS-based capacity expansion and production cost models to evaluate clean resource deployment, system costs, and market behavior.
- Conducted lifecycle GHG analysis for grid electricity, hydrogen and clean heat portfolios using GREET and Excel-based tools.
- Advised clients on strategic implications of evolving energy policy, market design, and carbon pricing programs.
- Supported transaction diligence and procurement for energy assets in CA, UT, CO, IL, and the broader Midcontinent region.

- Co-authored white paper on data center load growth, informing long-term resource planning and clean energy targets.
- Delivered strategic briefing materials for executives, summarizing risks and opportunities under new carbon market policies.
- Managed projects delivering custom reports and analysis to clients and served as the technical lead delegating tasks to team members while ensuring project outcomes and deliverables were successfully achieved.
- Supported energy asset acquisitions and procurement through transaction diligence, offtaker research and risk analysis for utilities, developers and investment firms in California, Utah, Colorado, and Illinois
- Managed a project that delivered a custom report for clients providing a summary of Washington's Cap-and-Invest carbon market policy, significant risk factors for electric utilities, comparative analysis of various short-term allowance price outlooks, and recommended actions to mitigate risks and generate additional revenue.

CALIFORNIA AIR RESOURCES BOARD

Air Resources Engineer, Industrial Strategies Division

Sacramento, CA

December 2020 – January 2022

- Performed greenhouse gas life cycle assessment of hydrogen, electricity, and renewable gas transportation fuels involving biomass, livestock manure, landfill organic waste, and carbon capture and sequestration.
- Prepared presentations and briefing documents to inform decisions made affecting LCFS policy and regulations
- Worked closely with pathway applicants and project developers to navigate the LCFS program, resolve abstract issues related to LCFS policy, and ensure program compliance.

CALIFORNIA PUBLIC UTILITIES COMMISSION

Utilities Engineer, Energy Division

San Francisco, CA

August 2018 – November 2020

- Researched and developed a project-specific, life cycle assessment model estimating the net criteria and greenhouse gas emissions of bioenergy projects relative to an alternate fate of eligible fuel resources. Time-based GHG impacts were modeled with IPCC equations estimating atmospheric persistence of CO₂, CH₄, and N₂O.
- Analyzed and visualized renewable energy market data to make inferences and determine statistically supported conclusions about load serving entities related to load variation, changing customer profiles, and project siting.

ROLLS-ROYCE NORTH AMERICA

Manufacturing Engineer

Indianapolis, IN

March 2016 – July 2017

- Used data and statistical process controls to identify production issues and to propose improvements and experiments that reduce operational costs and quality risks in manufacturing processes.

Education

University of California, Berkeley
M.S., Civil and Environmental Engineering

Berkeley, CA
May 2018

The Ohio State University
B.S., Industrial Systems Engineering

Columbus, OH
December 2015

Certifications and Trainings

- Professional Mechanical Engineer (License No.: 40539), California (Issued July 2021)
- Utility Rate School, National Association of Regulatory Utility Commissioners (NARUC) (Oct. 2020)
- Economics of Energy and the Environment, Energy Institute at Haas (Jan. 2020)
- Engineering and Business for Sustainability Certification, UC-Berkeley (May 2018)