Karl Walter

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ENERGY AND ENVIRONMENTAL ECONOMICS, INC. San Francisco, CA
Senior Consultant

Mr. Walter joined E3 in 2021. He is in the Bulk Grid group where he works on model development and deployment of E3's capacity expansion and resource adequacy models. He supports development of E3's Renewable Energy Solutions Model (RESOLVE) and is deploying E3's Resource Adequacy Model (RECAP) to help a collection of utilities understand the future of regional reliability in the Southwest.

Prior to joining E3, Mr. Walter worked at Guidehouse (fka Navigant), where he co-authored several technical reports on clean demand-side technologies – smart buildings, virtual power plants, low-GWP refrigerants, plug loads, and IoT devices. He also built packages and led impact evaluations in R for energy efficiency evaluations and helped design and create the Fuel Substitution Scenario Analysis Tool (FSSAT) for the CEC. Mr. Walter completed an M.S. in CEE - Systems from UC Berkeley and a B.S. in Engineering also from UC Berkeley.

GUIDEHOUSE CONSULTING San Francisco, CA
Consultant July 2018 – June 2021

- Co-created R-based Fuel Substitution Scenario Planning Tool for the California Energy Commission (CEC). This tool will enable building decarbonization efforts by outputting the demand, emission, and cost impacts of different electrification scenarios.
- Led R-based analyses and impact evaluation reports for five energy efficiency programs with 24,250 MWh of total savings.
- Co-authored technical research reports to guide California Energy Commission's investments in emerging technologies such as low-GWP refrigerants and smart buildings. A $13.5 million CEC solicitation was informed by our report on refrigerants.
- Designed market forecast models for Navigant Research reports on virtual power plants, microgrids, and modular microgrids.

ENERGY, CONTROLS, AND APPLICATIONS LAB (ECAL), UC BERKELEY Berkeley, CA
Undergraduate Researcher January 2018-May 2018

- Reviewed fast charging literature to identify new modeling and optimization techniques which yielded novel results.

CARBON180 Oakland, CA
Intern June 2016 – August 2016

- Headed biochar research: interviewed 15 industry experts and developed introductory literature and policy recommendations. Presented findings at Cal Energy Corps Symposium.

Education

University of California, Berkeley — Berkeley, CA
M.S., Systems Engineering in Civil and Environmental Engineering — May 2021

University of California, Berkeley — Berkeley, CA
B.S., Energy Engineering, Minor in Public Policy — May 2018

Citizenship

United States, Austria

Reports

Gangelhoff, G., T. Wallace, H. Jiang, **K. Walter**, H. Felicien, A. Burdick, A. Olson. September 2021. *Review of Puget Sound Energy Effective Load Carrying Capability Methodology*. Energy and Environmental Economics.

Mehrhoff, J., P. Asmus, H. Lorah, **K. Walter**. Q2 2020. *Virtual Power Plant Overview: Flexibility Market Analysis and Forecasts: 2020-2029.* Guidehouse Insights.

Goetzler, W., D. Ghosh, B. Feldman, J. Mehrhoff, P. Thakur, **K. Walter**. Q1 2020. *Smart Building Ecosystem: Current Status and Future Opportunities.* Navigant prepared for California Energy Commission.

Goetzler, W., J. Young, G. Parzygnot, **K. Walter**. Q4 2019. *RD&D Opportunities to Reduce Plug Load Energy Consumptions.* Navigant prepared for California Energy Commission.

Feldman, B., J. Mehrhoff, **K. Walter**, R. Taylor, H. Lorah. Q3 2019. *Integrated DER Programs for Utilities and Energy Suppliers: Drivers, Barriers, Case Studies, and Market Forecasts.* Navigant Research.

Goetzler, W., J. Young, P. Thakur, **K. Walter**. Q2 2019. *RD&D Opportunities to Advance Low Global Warming Potential Refrigerants and Non-Vapor-Compression Technologies.* Navigant prepared for

Presentations

Young, J., **K. Walter**. 2020. "PNNL VOLTTRON Market Assessment." Guidehouse prepared for PNNL.

Walter, K. 2018. "RecoverE: Smart Drain Water Heat Recovery." BERC Energy Summit. UC Berkeley.

Walter, K. 2017. "Electric Vehicle Cost Recovery by Utilities." Navigant.