

BENJAMIN HALEY

2443 Fillmore St #380-5304
San Francisco, CA, 94115
(415) 580-1804

ben.haley@evolved.energy

Energy consultant with experience across all aspects of electricity and energy sector planning including long-term greenhouse gas target achievement, distributed resource portfolio optimization, and asset evaluation.

PROFESSIONAL EXPERIENCE

EVOLVED ENERGY RESEARCH, SAN FRANCISCO, CA

Co-Founder, January 2016– Present

- Founded Evolved Energy Research, a consulting firm focused on energy-sector transformation in the context of deep decarbonization. Lead developer of two software tools – EnergyPATHWAYS and the Regional Investment and Operations platform (RIO) – designed to answer questions posed by these types of energy systems
- Technical lead for work on deep decarbonization that:
 - Supported state government energy plans in Washington State, New Jersey, and Massachusetts
 - Informed U.S. climate strategy for NGOs including Bipartisan Policy Center, Clean Air Task Force, Environmental Defense Fund, National Resources Defense Council, Our Children’s Trust, Third Way, and the Union of Concerned Scientists
 - Developed NGO pathways for state and regional decarbonization in Florida, California, New Mexico, Colorado, Nevada, Pennsylvania, Arizona, Illinois, Maryland, and the Pacific Northwest
 - Provided core energy system modeling and scenario analysis for Princeton’s Net-Zero America Project (NZAP)
 - Underpinned public utility reports on decarbonization by Hydro-Quebec and Portland General Electric as well as numerous confidential utility engagements in California, New York, and Michigan.
 - Advanced new approaches for energy system planning in Europe, Mexico, and Japan. Produced Carbon Free Europe analysis charting pathways to decarbonization for the European continent.
 - Pioneered cutting-edge analytical methods including development of a new approach to marginal abatement cost (MAC) curves and assessing the value of innovation for Environmental Defense Fund.
- Other projects include work with DOE’s Office of Energy Policy and Systems Analysis on the value of flexible loads in the U.S.; work with the National Renewable Energy Laboratory on their *Electrification Futures Study* initiative; and work with other electric utility clients on deep decarbonization - related topics

UNITED STATES DEEP DECARBONIZATION PATHWAYS RESEARCH TEAM, SAN FRANCISCO, CA

Technical Lead, August 2015– Present

- As the lead analyst for the U.S. research team, contributed to the 2014 Deep Decarbonization Pathways Project (DDPP) Synthesis Report and the 2015 DDPP Synthesis Report issued to the U.N. by the Sustainable Development Solutions Network (SDSN) and the Institute for Sustainable Development and International Relations (IDDRI)
- Built the US PATHWAYS model that provided the analytics for the USDDPP reports: “Policy Implications of Deep Decarbonization” and “Pathways to Deep Decarbonization”

ENERGY & ENVIRONMENTAL ECONOMICS, INC., SAN FRANCISCO, CA

Senior Consultant, June 2010 – December 2015

- Lead developer of PATHWAYS, an economy-wide, bottom-up energy sector model used to inform mid-term greenhouse gas target-setting by the California Governor’s Office

- Lead technical analyst on a distributed resources planning model for Con Edison of New York that was used to develop portfolios that include energy storage, demand response, energy efficiency, and customer-side generation resources consistent with the state of New York's Utility 2.0 vision. The model was selected by the Utility Analytics Institute in 2014 for its "Most Innovative Award"
- Developed the Energy Storage Valuation Tool for the Electric Power Research Institute (EPRI), which allows for comprehensive cost-benefit analysis amongst different technology options and applications

ACADEMIC PUBLICATIONS

- Haley, et. al (2012). "The 2020 emissions reduction impact of urban water conservation in California," *Journal of Water and Climate Change*.
- Williams, J.H., R. Jones, B. Haley, G. Kwok, J. Hargreaves, J. Farbes, M.S. Torn (2021). "Carbon-Neutral Pathways for the United States," *AGU Advances*.
- Jones, R., B. Haley, G. Kwok, J. Hargreaves, J.H. Williams (2018). "Electrification and the Future of Electricity Markets," *IEEE*.
- Cutter, E., B. Haley, J. Hargreaves, J.H. Williams (2014). "Utility scale energy storage and the need for flexible capacity metrics," *Applied Energy*.
- DeBenedictis, A., B. Haley, C.K. Woo, E. Cutter (2013). "Operational energy-efficiency improvement of municipal water pumping in California," *Energy*.
- Mahone, A., B. Haley, R. Orans, J.H. Williams (2011). "Electric Vehicles and Gas-Fired Power: A strategic approach to mitigating rate increases and greenhouse gas price risk", *Public Utilities Fortnightly*.
-

OTHER PUBLICATION

- Mai, T., P. Jadun, J. Logan, C. McMillan, M. Muratori, D. Steinberg, L. Vimmerstedt, R. Jones, B. Haley, B. Nelson (2018). "Electrification Futures Study: Scenarios of Electric Technology Adoption and Power Consumption for the United States," NREL/TP-6A20-71500.
- Larson, E., C. Greig, J. Jenkins, E. Mayfield, A. Pascale, C. Zhang, J. Drossman, R. Williams, S. Pacala, R. Socolow, R. Birdsey, R. Duke, R. Jones, B. Haley, E. Leslie, K. Paustian, and A. Swan (2020). "Net-Zero America: Potential Pathways, Infrastructure, and Impacts," Princeton University.

EDUCATION

UNIVERSITY OF CALIFORNIA, Berkeley, CA

Doctor of philosophy in Energy and Resources, 2022-

MIDDLEBURY INSTITUTE OF INTERNATIONAL STUDIES, Monterey, CA

Master of Arts in International Environmental Policy, May 2010

BUCKNELL UNIVERSITY, Lewisburg, PA

Bachelor of Science in Business Administration, May 2007