



BERKELEY LAB



BUILDING HEALTHIER AND MORE ENERGY-EFFICIENT COMMUNITIES

In many disadvantaged communities in California and across the nation, high levels of pollution, poor air quality, and lack of adequate air conditioning contribute to adverse health outcomes. Due to low disposable incomes and other barriers, many families in disadvantaged communities have limited access to clean technologies, including energy efficiency upgrades, solar power, and electric vehicles, which could relieve pollution burdens.

THE PROJECT

In partnership with the City of Fresno and other stakeholders, Berkeley Lab researchers developed a community energy action plan that prioritizes deploying efficiency measures, electrification, and distributed energy resources to achieve simultaneous climate benefits, air quality improvements, and clean energy equity gains. This initiative provides a blueprint for creating healthier and more energy-efficient communities.



FEWER
heat-related deaths



BETTER
health



LOWER
healthcare costs

+ WE PARTNERED WITH +



BACKGROUND

As a National Laboratory funded by the U.S. Department of Energy, Berkeley Lab is committed to a just and equitable energy transition. We strive to ensure that the impacts of our research benefit all communities, as well as future generations. To meet these goals, we partner with community-based organizations, public, and private agencies to help make clean energy technologies and resources accessible to all.

In this project, Berkeley Lab researchers worked with the City of Fresno and other stakeholders to develop a holistic and equitable plan to improve access to clean energy technologies in the Central Valley, with the goal of building healthier and more energy-efficient communities and serving as a model for other communities.

[Visit Berkeley Lab's Equitable & Just Energy Transition Website](#) ▶



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ABOUT THE PRINCIPAL INVESTIGATOR

Max Wei is a Staff Scientist in the Sustainable Energy and Environmental Systems Department in the Energy Analysis and Environmental Impact Division at Lawrence Berkeley National Lab. His expertise is in energy system modeling for deep decarbonization, residential sector energy modeling, extreme heat resilience, energy equity, and techno-economic analysis of emerging technologies including fuel cells systems and cooling systems with low global warming refrigerants.

A frequent writer and speaker on climate change mitigation issues, policies, and pathways, Max earned his M.B.A. and his Ph.D. in Electrical Engineering and Computer Sciences from UC Berkeley.

Max Wei, et. al. [Building Healthier and More Energy-Efficient Communities in Fresno and the Central Valley](#). Final Project Report, California Energy Commission (2023).

Max Wei, et. al. [An Action Plan for Greater Climate Equity for Disadvantaged Communities in Fresno](#). Report, Lawrence Berkeley National Lab, Every Neighborhood Partnership, Rising Sun Center for Opportunity, City of Fresno (2023).

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