

City of Oakland

EPIC/R&D Needs September 2023



Oakland and other leading California cities are focused on a variety of advanced energy programs and resilience needs. EPIC and other R&D efforts are critical to the ability of cities to meet climate action and resilience targets.



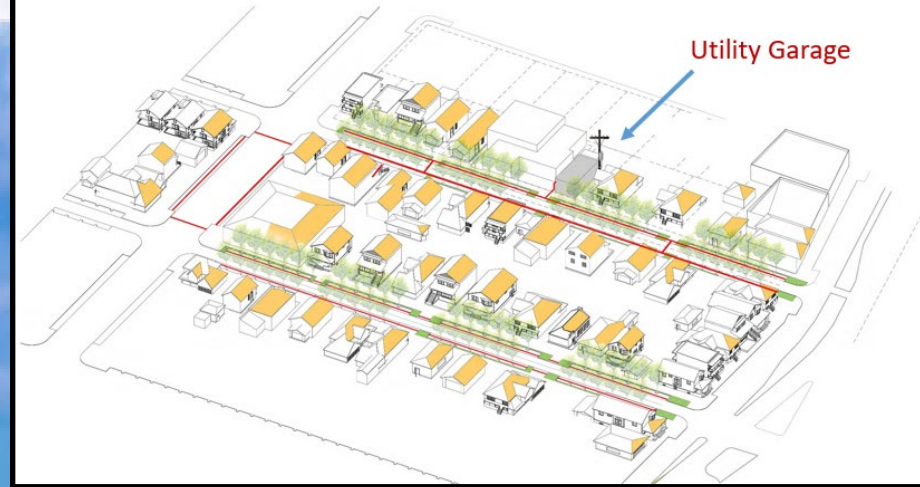
Photo: Greg Linhares, City of Oakland

Oakland Advanced Projects

Oakland has an ambitious Equitable Climate Action Plan that requires substantial innovation and investment in electrical energy systems:

- Creation of resilience hubs, public-serving facilities with solar plus storage, emergency management capabilities, and community resources
- Complete building electrification citywide by 2040 (more than 150,000 buildings)
- Complete transportation electrification by 2045
- Pilot and early adopter programs for non-traditional scale programs, like Oakland EcoBlock (full street electrification and efficiency) and Port/City infrastructure pilots.

Electricity: communal, solar rooftop microgrid system



Key R&D Needs

Oakland projects are challenged by a number of infrastructure, process, and personnel difficulties that could be addressed in EPIC:

- Extraordinary delay times throughout the interconnection process for solar PV and EVSE.
- Lack of advanced planning for grid needs, providing designers with actionable information for distribution system shortcomings
- No strategic vision on two-way power issues (building to grid, vehicle to grid) on which cities can build strategies to support
- Lack of focus on equity in R&D – cities are planning for models that address racial and social equity needs. R&D needs to reflect those needs in providing guidance.

