

California Department of Forestry and Fire Protection (CAL FIRE)

CAL FIRE streamlines and adopts fire codes relevant to ZEVs, implements training, and educates communities on fire safety.

Equity: Promote ZEV infrastructure safety across California, making sure priority communities are proactively addressed.

CAL FIRE ZEV MARKET DEVELOPMENT OBJECTIVES

- 1. Update the regulations.** Adopt changes in California Fire Code and nationally referenced standards to keep up with technology while providing safety to the industry and enforcing agencies.

Key collaborators: California Building Standards Commission, California Energy Commission, International Code Council, National Fire Protection Association, industry, and fire service.

Key results & actions:

- a) Adopt and maintain clear and updated regulations that provide safe use of the emerging green technology through the California Building Standards Commission. CAL FIRE's proposed regulations on Energy Storage System will become effective January 1, 2023, as part of the 2021 Triennial Code Cycle. These will create clear regulations, equity through the industry, promote safe products, and streamline the regulatory approval process.
 - b) Identify shortcomings in the California regulations and continue to update the regulations as needed. CAL FIRE submits regulation code proposals through the California Building Standards Commission every 18 months. Currently, in the 2021 Triennial Code Cycle, CAL FIRE is submitting updates for latest edition of UL 9540 Standard for Energy Storage System and Equipment to address the changes in technology.
 - c) Represent CAL FIRE at the International Code Council hearings and the National Fire Protection Association's (NFPA) code adoption processes as they address energy storage, mobile hydrogen fueling, and consider changes with photovoltaic systems.
- 2. Enforcement Regulations on State Property.** The State of California promotes the use of green technology and the installation of the infrastructure at state facilities. CAL FIRE has jurisdiction over state facilities and provides review, inspection, and approval of these systems.

Key collaborators: Design professionals and all state agencies.

Key results & actions: Safe installations of the ZEV infrastructure on state facilities. The ongoing process sets an example throughout the state.

- 3. Support and educate governmental officials.** CAL FIRE provides updates on changes in the regulations, assists the fire service and industry with questions, and issues formal code interpretations.

Key collaborators: California Fire Chiefs Association (Cal Chiefs) - Fire Prevention Officers Section, Society of Fire Protection Engineers, California Building Officials, fire departments, and fire districts.

Key results & actions:

- a) Provide regulatory updates to the Cal Chiefs Fire Prevention Officers through their monthly meetings, assist local departments and design professionals, and issues code interpretations when needed.
- b) Present the updated UL standard 9540 for Energy Storage Systems at the California Building Standards Commission Hearing in January 2022.
- c) In 2022, we expect to focus on Energy Storage Systems standards and will participate in the debates at the International Code Council's code hearing on UL 9540A, Test Method of Evaluating Thermal Runaway Fire Propagation in Battery Storage Systems.
- d) Enforcing agencies with informed staff promotes the streamlined review and inspections of the ZEV infrastructure. CAL FIRE will continue to respond to requests as they arise. Contact information and information on the code adoption can be found at:
<https://osfm.fire.ca.gov/divisions/code-development-and-analysis/>