

As more Americans switch to electric vehicles (EVs) and hundreds of billions of dollars are distributed through the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA), state agencies will play a continued role in the successful transition to electric transportation. This guide details immediate actions that state fire agencies or similarly focused organizations can take to prepare for the shift to EVs, bringing value to their state and constituents.

**Fire entities** prevent fires through education and enforcement of regulations. These agencies may be housed under different departments, but regardless of organizational structure, they can serve a pivotal role in the EV transition by addressing concerns about EV-related emergencies.



## Minimum Actions to Take Now

- Establish annual training for first responders to respond to EV fires.\*
- Collaborate with housing authorities on fire codes specific to EVs (e.g., installation of sprinklers in garages).
- Partner with state environmental protection agencies on proper disposal of batteries after fires.
- Create [educational materials](#) on what to do in the case of EV fires and proper charging for fire prevention. Local fire departments should distribute these materials within communities.

## Recommendations for Accelerated Adoption

- Collaborate on [best practice fire response plans](#) at the county, regional, and state levels.
- Incorporate EVs equipped with bidirectional technology into the state fire fleet for use as mobile power units in emergency response situations (e.g., at base locations for wildfire response units). See the EC's [V2X Implementation Guide](#) for more information.
- Electrify fire department fleet vehicles, including engines and pick-up trucks.

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\*GM offers [first responder training](#) for EVs.

## Case Study: Phoenix Fire Department

The **Phoenix Fire Department** in Phoenix, AZ is a leader in understanding, managing, and preventing EV battery fires. Although the number of fires is undoubtedly lower for EVs than ICE vehicles, Assistant Fire Chief Tim Kreis is working to ensure every member of his response team and the community is prepared for what to do in the event of an EV fire. The Department has taken many steps to prepare for the transition to EVs through extensive planning, training, and community engagement. Actions taken cover the following topics:

- **Training first responders:** The Phoenix Fire Department has successfully provided training for its first responders on EV battery fires, including an in-depth understanding of thermal runaway for all responders.
- **Educating the public:** To help distribute this information to the public, the Phoenix Fire Department has prepared educational materials for citizens on what to do in case of an EV fire, how to charge your EV safely, and what warning signs are for thermal runaway.
- **Partnering with towing companies:** The Phoenix Fire Department has developed unique partnerships with specific towing companies equipped to remove an EV from an accident scene after a fire and bring it to a designated lot for further monitoring by the fire department.
- **Installing sprinkler systems:** One of the most important safety measures to take, the fire chief noted, is installing sprinkler systems in parking garages. Doing so in older garages is particularly crucial, as they are less likely to already have these systems installed. Sprinklers can significantly reduce the damage to other vehicles and the building itself in the rare case of a vehicle fire.
- **Next steps:** As the Phoenix Fire Department regularly updates its EV fire response plan, it makes sure to share information regionally. The department aims to create best practices and standards for EV fire response that can be replicated nationwide. Assistant Chief Tim Kreis has shared that the Phoenix Fire Department and its regional partners have all worked together on revisions to shared EV response plans and firefighter training efforts.

## About the Electrification Coalition

The Electrification Coalition is a nonpartisan, nonprofit organization that advances policies and actions to facilitate widespread deployment and adoption of electric vehicles in order to reduce the economic, public health and national security risks caused by America's dependence on oil. For more information, visit [electrificationcoalition.org](https://www.electrificationcoalition.org).